

JULY 1959

BUTANE-PROPANE News

A CHILTON  PUBLICATION

HEADQUARTERS FOR L.P. GAS INFORMATION SINCE 1931

BPN's eighth Sales
Roundtable report...29
Petrolane's automated
accounting setup ... 39

Take a tip from the Early Bird...

PLAN NOW...

for the heavy demands
of next winter.
Arrange to have all
your tanks full by
early this fall.

WARRENGAS
the Concentrated fuel



GARDEN PETROLEUM CORPORATION

TULSA, OKLAHOMA

DISTRICT SALES OFFICES
COLUMBIA, S. C. • FT. WORTH, TEXAS • MIDLAND, TEXAS
NEW YORK, N. Y. • HOUSTON, TEXAS • OMAHA, NEBR.
JACKSON, MISS. • ST. LOUIS, MO. • LOUISVILLE, KY.
TAMPA, FLA. • LOS ANGELES, CALIF.

FIELD REPRESENTATIVES
BRYN MAWR, PA. • ATLANTA, GA. • NEW HAVEN, CONN.
MONTGOMERY, ALA. • JACKSON, MICH. • FOND DU LAC, WIS.
NASHVILLE, TENN. • SPICER, MINN. • GARDEN CITY, KANS.

Where corrosion bites deepest this Hackney cylinder is doubly protected

Hackney Double-Bottom Cylinders

- extend cylinder life many years
- double protection where it is needed most
- prevent mud, ice and snow from collecting
- make cleaning and painting easy
- reduce maintenance costs sharply
- provide sure grip for easy handling

All Hackney LP-Gas cylinders feature light weight...deep drawn, 2-piece construction...one circumferential weld—eliminating head and side seams...X-ray control for uniform, full-strength welds...controlled, stress-relieving heat treatment...smooth, grit-blasted surfaces that speed cleaning and painting...high-bake, long-lasting paint...conformity to ICC specifications.

Write today for 8-page bulletin on cylinders and other LP-Gas containers and handling equipment.



Pressed Steel Tank Company

Manufacturer of Hackney Products

1487 South 66th Street, Milwaukee 14, Wisconsin

Branch offices in principal cities



cylinders



systems



fuel tanks for
trucks and tractors



lift truck tanks



tank trucks



transports



bulk storage tanks

Spotlighting the complete LMC line

for engineered liquid transportation

in every situation, and in whatever quantities, you can depend on LMC for more profitable transportation. You'll find it pays to take advantage of LMC's many years of experience in engineered liquid transportation. Write, wire or call today for completely illustrated literature.



DELIVERY UNIT-202 and T-1 Steel, sizes up to 5500 gallons.



TANK & PUP—Capacity up to 11,300 gallons.



SEMI & PUP—Capacity up to 11,500 gallons.



STRAIGHT BARREL, TANDEM AXLES—sizes up to 10,700 gallons.



STRAIGHT BARREL, SINGLE AXLE—sizes up to 8500 gallons.

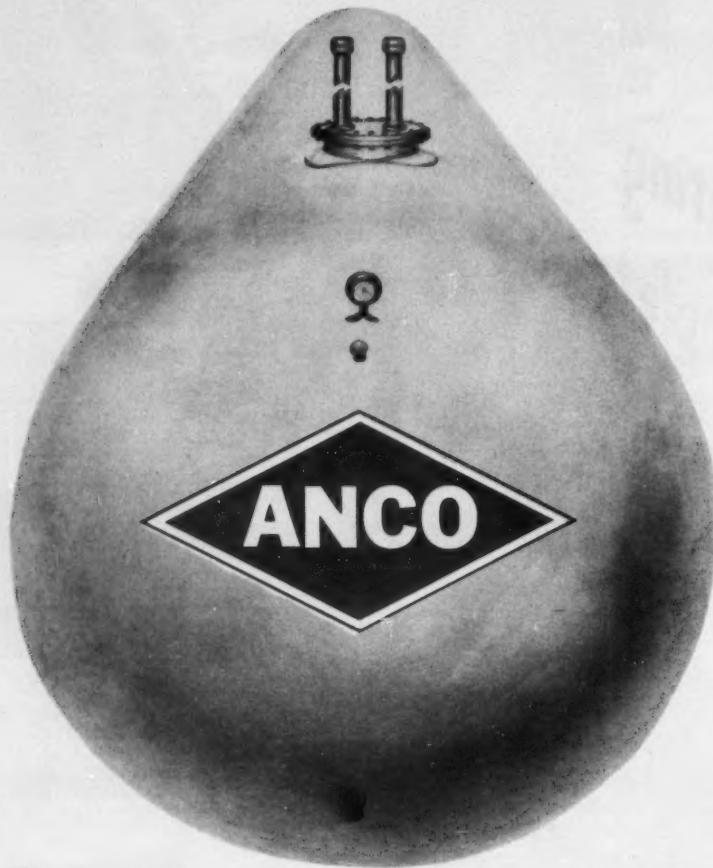
LUBBOCK MACHINE & SUPPLY CO.

P.O. BOX 11407 • P.O. BOX 21
LUBBOCK, TEXAS



Budget or Lease-
Purchase Plan

Now is the time to Build, Modernize, Enlarge



Planners, Fabricators, Suppliers, Erectors

Anco can handle any phase of an LP-Gas project regardless of size. All facilities are available within the Anco organization. ANCO will take full responsibility.

SERVICES — Anco personnel can handle all Layout, Engineering, Fabrication, Supervision and Construction on a Modernization, Enlarging or a new turnkey installation of a bulk plant, river terminal, stand-by or pipe line terminal plant. X-Ray and Stress relieving facilities to meet any requirements.

EQUIPMENT — Anco has two steel fabricating plants and several conveniently located warehouses. From these facilities Anco supplies LP-Gas systems, storage tanks in all sizes, pumps, compressors, valves, fittings and other specialized LP-Gas equipment to meet your requirements.

**Write for copy of our newly designed
drawing of our high capacity bulk plant.**

ANCO MANUFACTURING & SUPPLY CO.

TULSA, OKLAHOMA — 21st at Union — LUther 4-6187

MEMPHIS, TENN. • EAST ST. LOUIS, ILL. • DES MOINES, IA.
241 Industrial Ave.—WHitehall 6-1694 • 6503 St. Clair Ave.—EXPress 7-0200 • 327 Ins. Exch. Bldg.—CHerry 4-5347
(Highway 50)

CONTENTS • JULY 1959

Volume 21 - Number 7

BPN

Features Digest

An LPGA convention highlight— BPN's 8th Sales Roundtable.....	29
This LPGA convention highlight proved to be a thought-provoking session centered on two subjects: the new automatic range ignition requirements and promotional activities.	
William T. Harper	
Rx for old cylinders	33
Faced with the problem of what to do with out-dated, heavy, hard-to-handle, yet still serviceable, R-type cylinders, Pyrofax Gas Corp. engineers came up with a solution that fills a definite, continuing need.	
How to install domestic incinerators.....	36
Locating the incinerator, venting it, connecting the gas, lighting, adjusting, and testing.	
Automated accounting simplifies bookkeeping for 113 operating districts	39
A comprehensive study of how an operation that is strung out from the Mexican border to Alaska, Petrolane Gas Service Inc., has followed a plan of centralization, standardization, automation.	
William W. Clark	
After eight years—free radio commercials are still this dealer's best advertising	49
Giving away radio time to allow the general public to buy, sell, and trade odds and ends has proved to be the best form of advertising for a prosperous Texas dealer.	
C. C. Springfield	
Leave your customers smiling!	51
Seven steps to make service pleasant, how to handle special situations, a quiz for servicemen.	
Thar's still gold in them thar mills.....	54
The once-fabulous Cripple Creek (Colo.) gold mining district is only a shadow of its former self, but one gold mining firm keeps going profitably by utilizing LPG in its cyanide ore reduction process.	
J. Arthur Thompson	
There's still time! Build a summer load via this 8-step plan.....	56
There's still time to build a summer load and this marketing expert's plan could generate enough momentum to institute the year-around aggressive attitude needed by today's LPG dealer.	
M. E. Wank	
Traditional sorghum making modernized with the aid of LPG	57
A third-generation sorghum-maker and his son utilize LPG to eliminate the traditional back-breaking labor necessary to produce this southern delicacy.	
Robert Clay	
Effective school range plan can assure future market.....	95
With over one-half million teenage brides each year, school range programs are an important promotional activity that no progressive LPG dealer should ignore, says Robert E. Leitch, vice president of Bottled Gas Corp. of Virginia.	

Power Section

The city that went LPG.....	99
What prompted Dyersburg, Tenn., to convert all of its municipal vehicles to LPG? BPN sent an ace correspondent to the town for an on-the-scene report.	
Emmett Maum	

Departments

Advertisers' Index	108	Highlights	13
Associations	59	Letters	19
Behind the Scenes	11	News	64
Beyond the Mains	27	Power	99
Calendar	62	The Trade	78
Classified	106	Washington Report	25
What's New in Products and Trade Literature			83

RUGGED

NEW 1½", 2" AND 3"

FLANGED-TYPE VALVES...

lowest first-cost, longest service

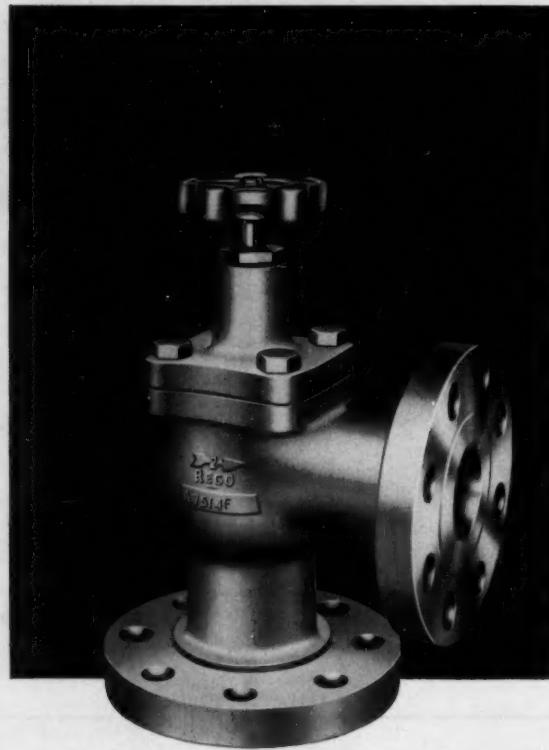
*for money-saving reliability,
it always pays to buy*

REGO®

You asked for them, so here they are . . . flanged globe and angle valves, RegO-built with all the quality features you have learned to expect from the leader. They're maintenance-free, virtually indestructible, and remarkably easy to operate. You can get them now from either Bastian-Blessing or your RegO distributor.

Flanged Angle Valves

1½"	No. A7512F
2"	No. A7514F
3"	No. A7518F

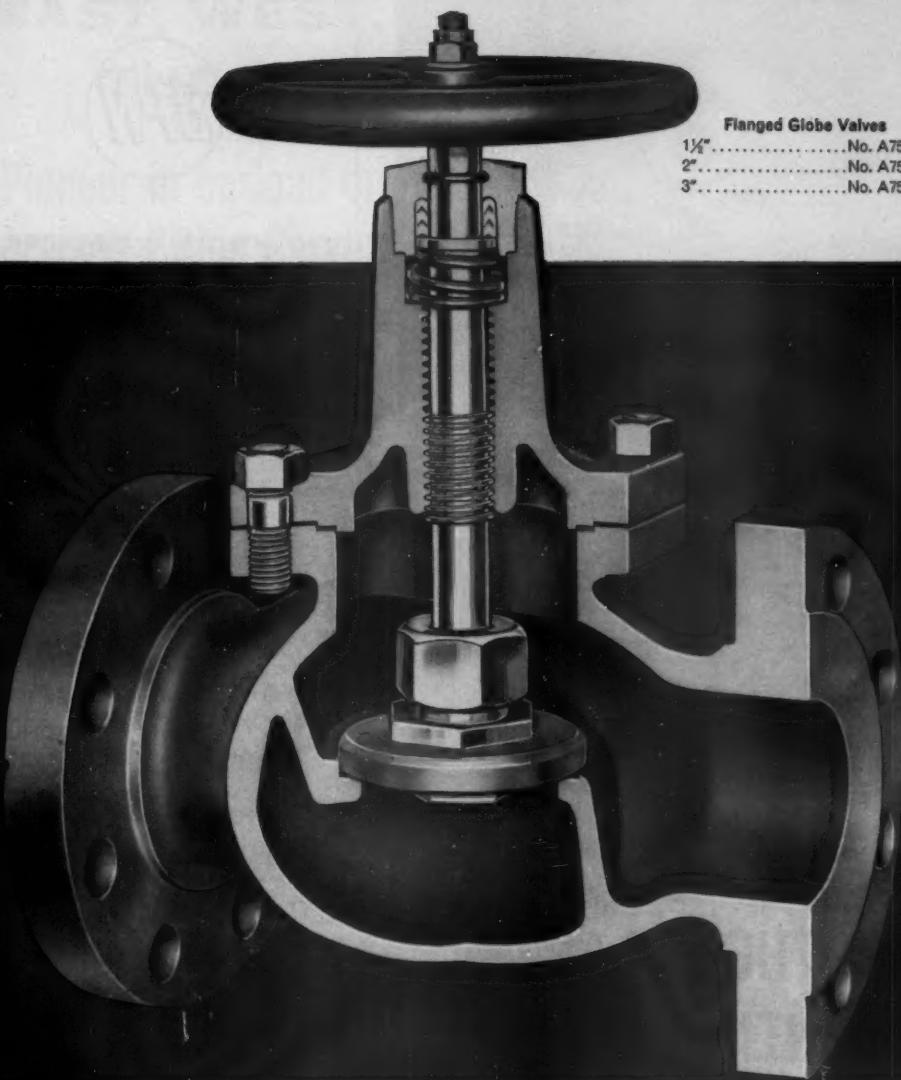


DO YOU KNOW
It will pay you dividends
to join!



The **BASTIAN-BLESSING** Company

4201 West Peterson Avenue • Chicago 30, Illinois



Flanged Globe Valves

1½"	No. A7511F
2"	No. A7513F
3"	No. A7517F

**WHY THESE NEW REGO GLOBE AND ANGLE VALVES
✓INSTALL EASIER ✓WORK BETTER ✓LAST LONGER**

Ductile Iron Body and Bonnet—strong, tough, shock-proof; won't crack or fracture from wrenching, dropping or hammer blows.

Easy-Turn Handwheel—for firm grip with ample leverage.

Stainless Steel Stem—can't rust, gall or freeze. Large Acme thread for quick opening, closing. Thread sealed from elements by "O"-ring stem seal. Swivel seat prevents uneven wear.

V-Ring Pressure Seal—a famous Rego exclusive . . . no packing to adjust, no leakage. Assures easy operation under pressure.

Positive Closure—resilient, long-lasting, synthetic rubber seat.

Greater Flow, Less Pressure Drop—globe valve has "circular bridge" construction;

angle valve is designed with "dropped seat."

Take Less Space—need less clearance for handwheel, occupy less shelf room; require same face-to-face clearance as most gate valves. Flanges are standard dimensions.

Lighter Weight—makes handling and installing easier, reduces shipping costs.

Interchangeable—ideal for LP-Gas, Anhydrous Ammonia, and numerous other gases and liquids.

Adaptable—side port can be tapped $\frac{1}{4}$ " NPT or $\frac{3}{8}$ " NPT for bleed, relief, or by-pass valve.

Pocketbook Pleasers—with all these advantages, Rego prices are the Industry's lowest . . . thanks to efficient high-volume production.

THERE'S A FULL SELECTION OF DEPENDABLE REGO SCREWED-TYPE VALVES, TOO, FROM $\frac{3}{4}$ " to 3"

Screwed-Type Globe Valves

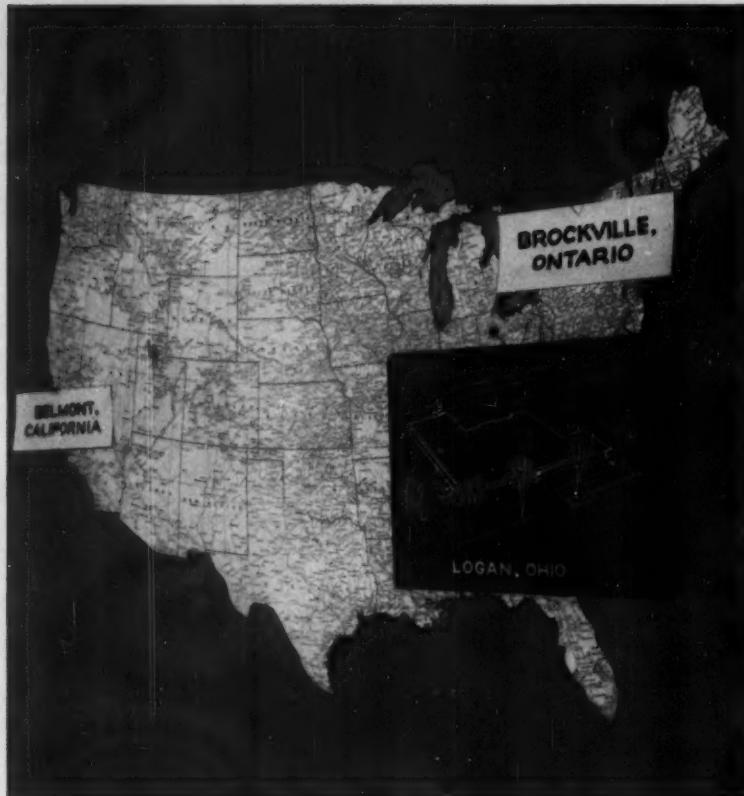
$\frac{3}{4}$ "	No. A7505
1"	No. A7507
1½"	No. A7509
2"	No. A7511
2½"	No. A7513
3"	No. A7515
	No. A7517



Screwed-Type Angle Valves

$\frac{3}{4}$ "	No. A7506
1"	No. A7508
1½"	No. A7510
2"	No. A7512
2½"	No. A7514
3"	No. A7516
	No. A7518





METALBESTOS PUTS ANOTHER PLANT ON ITS VENTING MAP

A significant addition to the Metalbestos marketing network, this new plant in Logan, Ohio, is scheduled for mid-1959 completion. It follows closely on the heels of another production facility established last year: The Metalbestos Manufacturing Company in Brockville, Canada.

At its new Ohio plant Metalbestos will manufacture a complete line of gas vent and all-fuel chimney products. The result will be to expedite distribution and service to eastern, southern and midwestern customers.

In the words of William Wallace Company president, Alan Kinkead, "This is an important new link in our chain of plants, warehouses and factory representatives. It should materially assist those engaged in serving North America's heating needs."

M-7



METALBESTOS DIVISION
WILLIAM WALLACE COMPANY • BELMONT, CALIF.



A CHILTON PUBLICATION

EDITORIAL

WILLIAM W. CLARK: EDITOR

Robert Clay: Managing Editor
Lynn C. Denny: Associate Editor
William T. Harper: Eastern Editor
Mary Lou Harrington: Assistant Editor
Lester L. Luxon: Technical Editor
Raymond A. Grote: Art Editor
Neill R. Regeimbal: Washington Editor
Robert Gunning: Readability Consultant

BUSINESS

FRANK M. CHAPMAN: PUBLISHER

Gilbert Bowman: Promotion Manager
Roberto Conaway: Production Manager
Gerald N. Smith: Circulation Manager

ADVERTISING OFFICES

New York (17) 100 E. 42nd St.
Richard Duffy, Oxford 6-2166

Chicago (1) 360 N. Michigan Ave., Suite 418
Richard L. DeMuesy, Randolph 5-2166

Cleveland (15) 930 B. F. Keith Bldg.
Howard Baird, Superior 1-2860

Dallas (6) 189 Meadows Bldg.
William J. Smyth, Emerson 8-4751

San Francisco, 1355 Market St.
Frank McKenzie, Underhill 1-9737

Los Angeles (57) 198 So. Alvarado St.
Larry Jackson, DUnkirk 7-4337

BUTANE-PROPANE News is published monthly. Copyright 1959 by Chilton Company, Chestnut and 50th Sts., Philadelphia 37, Pa. Subscription price: United States, U. S. possessions and Canada \$5.00 per copy; one year, \$2; two years, \$3. Mexico, South and Central America, Caribbean area: one year, \$3; two years, \$5. All other countries \$10 per year. Second Class postage paid at Phila., Pa. Member of Liquefied Petroleum Gas Association, National Fire Protection Association. Available on microfilm.

G. C. BUZBY, President

Vice Presidents: P. M. Fahrendorf, Leonard V. Rowlands, George T. Hook, Robert E. McKenna. Treasurer, William H. Valla; Directors: Maurice E. Cox, Frank P. Tighe, Everit B. Terhune, Jr., Russell W. Case, Jr., John C. Hildreth, Jr., Charles A. S. Heine, John H. Kofron

Stanley Appleby, Comptroller

Editorial and advertising offices:
198 So. Alvarado St., Los Angeles 57
Phone DUnkirk 7-4337



BUTANE-PROPANE News

EAST, WEST, NORTH OR SOUTH— THE STORY'S ALWAYS THE SAME

Pioneer in carload ordering praises Cities Service “flexibility” in delivery

One of the nation's oldest LPG firms and pioneer in ordering by carload lots, Blaugas Company credits Cities Service for flexibility in delivery. President G. F. Bursinger states, "We try to out-guess the weather by 40 days and this can mean last minute reorders or cancellations. With Cities Service we have this necessary flexibility. Also, I am given a sense of security that's important to us in the gas business. I know that I'm going to get my shipment on time and in the quantity that's needed."



Technical help from Cities Service saved thousands

"Technical help from Cities Service enabled us to save thousands of dollars on new bulk plant site." Marshall Smith, President of American Petroleum, tells of trying to locate a new bulk plant in Davenport . . . "We had a favorable site next to the railroad siding, but unfortunately we would have to run the risers from the opposite side of the tracks up over to the plant. We were about to give up and lease a more expensive site when a Cities Service technical man showed us how we could run the lines *under* the track. Through his past experience in legal procedures involved and special conditions to be met, we saved thousands."

Join the parade of satisfied LPG distributors who look to Cities Service for dependable supply and realistic cooperation. Call or write the office listed nearest you.

CITIES SERVICE

QUALITY PETROLEUM PRODUCTS

626 E. Wisconsin Ave. Milwaukee 2, Wisconsin 1658 East Euclid Des Moines 13, Iowa 170 University Ave. Toronto 1, Canada

3435 Broadway
Kansas City 11, Missouri

20 N. Wacker Drive
Chicago 6, Illinois

701 Sherland Building
South Bend 1, Indiana

500 Robert Street
St. Paul 1, Minnesota

6611 Euclid Ave.
Cleveland 3, Ohio

7730 Carondelet Ave.
Clayton 5, Missouri



A Bigger Share...

Allen BUTANE GAS CO.

BULK STORAGE

Providing maximum LPG storage for your customer's security is one of the best ways possible for you to gain and hold customers. The cost is practically nothing! The steel propane storage tank on your lot is worth just as much today as it was ten years ago... and it will retain its value.



- **Haul Extra Gallons Each Trip**
- **Deliver Extra Gallons Each Trip**
- **Work Fewer Hours**
- **Reduce Overtime Costs**
- **Drive Less Miles**
- **Earn More Money**

... The Nor-Tex Way!

WRITE, WIRE
OR PHONE
FOR PRICES

Nor-Tex

PRODUCTS
COMPANY

National Sales Agents for

Haul More Gas...Less Steel **Than Ever Before!**

All Nor-Tex Delivery Equipment embodies the newest development in sleek, **LIGHTWEIGHT**, streamlined twin or single barrel LPG Delivery Units featuring original Nor-Tex **ALUMINUM SKIRTING** and **CABINETS**. Exclusive Nor-Tex engineering designs have produced ideal balance and drastically reduced over-all gross weight. Side or rear cabinets on these new lightweight units are optional and are arranged to fit your individual requirements.

WE ARE TRUCK DISTRIBUTORS

As authorized new truck distributors Nor-Tex can save you hundreds of dollars on Internationals...Chevrolets...Fords...GMC's and Dodges. Order any unit you need. You can't beat a Nor-Tex deal for all-around value.



NORTH TEX

OF THE RICH LP GAS MARKET CAN BE YOURS

...With Low Cost **Nor-Tex** Quality Equipment

TRANSPORTS

You can now haul **MORE GAS and LESS STEEL** than ever before with skillfully engineered, smart looking, streamlined Nor-Tex transports of T-1 and A-202 steel. These easy-to-maneuver, road-tested units are hauling more gas and substantially boosting profits for users everywhere. Nor-Tex transports are also completely safe and dependable... built by men with years of bulk plant experience.

May we help you? Phone, wire or write today! Interested attention, experienced assistance and helpful suggestions are yours for the asking.

Whatever your needs in LPG equipment there is a safe, profitable, factory tailored Nor-Tex unit ready for you. We are truck distributors and we manufacture LPG Truck and Transport Tanks, all types of LPG Tractor and Motor Fuel Tanks, Portable LPG Filling Stations, Trailer Tanks, LPG Storage and Domestic Tanks, Farm Carts and Anhydrous Ammonia Tanks, all built by men with years of Butane-Propane bulk plant experience. Let Nor-Tex help you boost profit and slash delivery costs with High Flow piping... faster loading and unloading units.



Nor-Tex
LOW COST
LPG
Financing

A PLAN TO MEET EVERY NEED!

4 BIGGER PAYLOAD DELIVERY UNITS

- STANDARD TWIN
- PAYLOAD SPECIAL
- CUSTOM TWIN
- DELUXE TWIN

2500 WG Units Weigh Under 23,000 lbs. Loaded

Every bulk plant operator is interested in these four new, sleek, LIGHT-WEIGHT, streamlined, twin or single barrel Nor-Tex LPG Delivery Units with their high flow plumbing. Even 3000 WG units and over are within the 18,000-lb. axle limit.

For day in, day out efficiency, durability, payload, fast loading, high rated delivery, perfect balance and appearance Nor-Tex delivery equipment can't be beat. Nor-Tex engineering has greatly reduced over-all weight.

A S T A N K C O.

P. O. BOX 1219
DENTON, TEXAS
DUPont 2-5416

PROFIT

WITH
**WEATHERHEAD
CYLINDERS**
100-50-40-20 LB.

Bigger profit-making fall and winter gas loads are within your reach with Weatherhead cylinders. You'll find one-source supply a real buyer's benefit, and regardless of your ready cash position our leasing plans can help you sell more LPG for a brighter profit picture. Check today!

NOW lease the
complete system
at only \$695

WITH NEW
**WEATHERHEAD
PACKAGE LEASING**

Just announced! . . . a plan to give you the *complete cylinder system* — 100 lb. cylinders, LP-Gem regulator, valves, pigtails, manifold. LPG Leasing Corporation, a Weatherhead subsidiary, offers various sizes and types of single cylinders too, to help you expand to your best profit level.



Get full details
from your nearest
Weatherhead
Representative
or write.

Go LPG the Weatherhead Way
for Leadership, Profit and Growth!



WARRANTY
PROTECTION ON
ALL WEATHERHEAD
LP-GAS PRODUCTS

THE WEATHERHEAD COMPANY
LP-Gas Equipment Division
Cleveland 8, Ohio

The Weatherhead Co., Cleveland 8, Ohio
1400 Division Cleveland, Ohio • Cable Address: WEATHER

SINCE 1919 . . . 40 Years of Manufacturing Experience

behind the
scenes **BPN**

**The LPG business
is hot in Chile**

One of the nice things about the publishing business is that interesting readers occasionally drop in—and give you a whole new perspective. Such a recent visitor to the BPN office was Saturnino Carrasco, president of Soc. Abastecedor de Combustiles S. A., Santiago, Chile.

On a buying trip in this country, Reader Carrasco dropped in to get a few bits of information about the Southern California LPG business. He wound up giving us a first-hand picture of the LPG business in booming South America.

In answer to our very first question, Carrasco told us that Chileans get their LPG from Chile. Oil from the Magellan Islands (at the very tip of South America) is brought up along the coast by tanker to Valparaiso refineries, which opened up ten years ago. For the first seven years, however, all the LPG was used within the refineries. Now, it is trucked 100 mi inland to Santiago.

To quote but a few of the more choice statistics; Santiago, the capital of Chile, has grown from 1-million to 1½-million people in the last ten years! Carrasco's firm began handling LPG three years ago, when it first became available in Chile. Today the firm sells 50,000 gal. per month; and in five years, sales are expected to increase ten-fold to one-half million gal. per month!

"It could grow even more," he added, "but we couldn't keep up with it."

Carrasco had to cut short his Los Angeles stay because of urgent "Get us more equipment—quick!" calls from Santiago. During the next year, he expects to make several trips between the two continents, but has promised to take time out to give us a feature on the red-hot LPG business in Chile.

Trinity's got it



NEW ASME CODE

OLD CODE

maximum payload
now greatly
increased by...

NEW CODE

authorizes 100%
joint efficiency tanks
fully x-rayed out
of 115,000
high-tensile
T-I Steel.

BIGGER PAYLOADS

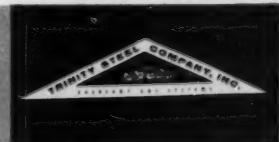
Trinity Steel is first with New Code Transports . . . at the same low WG Capacity Cost! For example, a Trinity T-I Transport with a capacity of 8,920 net gallons under the old code now can be increased to 9,220 net gallons . . . at the same low WG Capacity Cost!

You get 300 net gallons *more* payload. Today . . . write, wire or call collect about *your* New Code Trinity T-I Transport. Join the happy list of customers who have made Trinity Steel Co. the world's largest fabricator of T-I Transports.

TRINITY STEEL CO., INC.

4001 IRVING BLVD., DALLAS, TEXAS, U. S. A. PHONE FLEETWOOD 7-3961

Latin American Division: *Tanques de Acero Trinity, S. A. Calle Poniente 150 No. 734, Mexico, 16, D. F.* Plant and Sales Office.



MORE COMFORT IN YOUR HOME

See the bewitching modern gas ranges at your Philgas Distributor's showroom! ... wall-type ovens and broilers, convection, and even automatic control of top burners! ... ② Refrigerate with dependable Philgas. Won't "go off" even when winds or power cause power failures! ③ Automatic Philgas water heater is more reliable than larger, more expensive types using other types of fuel! ④ No more worry over clothes that hang up in unpredictable weather when you use an automatic Philgas clothes dryer. Recommended to install and use!

Home Air Conditioning

A central heating system using Philgas stays cool, winter warm and cozy in summer. More powerful and more efficient than electric, gas is the more reliable source of heat. Just like the temperature outside, your home is more comfortable, more beautiful with Philgas.

For more information, or the address of your nearest distributor, write:
PHILLIPS PETROLEUM COMPANY
Bartlesville, Oklahoma.

You can't beat Philgas for mobile-fuel operations all around the farm. This high-octane LP-Gas gives you more power up engines and cuts your oil consumption. Philgas cuts motor maintenance costs, can even double the life of your engine. Philgas costs less than gasoline or kerosene to store. Check your Philgas Distributor for all the reasons why Philgas does so many jobs better than any other type of fuel.

MORE PROFITS FROM YOUR FARM



Philgas gives you more work per fuel dollar. And it's the most reliable fuel for your tractor, as well as a fine fuel for irrigation pumps. Depend on Philgas.

Our irrigation pumps with Philgas. Irrigation is an expensive operation, but Philgas can help. Fewer tanks, less fuel, less maintenance, less wear, less cleaning, less downtime. Depend on Philgas.

Philgas is ideal for breeding. Farmers are getting more and more out of their animals, while there's a power failure. Dependable and economical to install and use.

Philgas is ideal for breeding. Farmers are getting more and more out of their animals, while there's a power failure. Dependable and economical to install and use.

Automatic crop drying with Philgas. Reduces fuel costs in the field, reduces fuel costs in the barn, reduces fuel costs in the truck. Makes it possible for you to harvest crops, when you can't get to them. Depend on Philgas.

Dairy and dairy processing with Philgas. Fresh, quality milk. Milk costs less with Philgas. Fresh, delicious milk. Fresh, quality milk. Milk costs less with Philgas. Depend on Philgas for all your fuel needs.

Our double-page spread will appear in full color in May magazine.

PHILGAS DISTRIBUTORS benefit from Philgas Advertising

Almost three million readers will see Philgas advertising this Spring in Farm & Ranch and Canner's Farmer! Full color, eye-catching, hard-selling! These ads are typical of the powerful and continuing advertising push that helps create new customers for Philgas distributors. Sell Philgas and get the full benefit of Philgas consumer advertising.

And Philgas distributors also enjoy these additional advantages:

1. The Philgas Business Control Workshop helps you run your business successfully.
2. The Philgas Cooperative Advertising plan includes newspapers, radio, TV, signs and other approved forms of advertising.
3. Sales Promotion Aids available. Streamers, point-of-sale, window signs, mailing pieces.

* Philgas is the Phillips Petroleum Company trademark for its high quality LP-Gas (propane, butane).

4. Planned Delivery System helps you make the best use of your transportation equipment and manpower.

5. Even Payment Plan helps both the consumer and the distributor.

6. Technical Assistance. Expert help on your individual operational problems is a very important reason for doing business with Phillips.

7. Adequate Supplies. Phillips Petroleum Company is the largest producer-marketer in the field. Modern storage facilities, pipelines and tank car fleet assure you of dependable supplies at all times.



PHILLIPS PETROLEUM COMPANY SALES DEPARTMENT, Bartlesville, Oklahoma

SALES OFFICES:

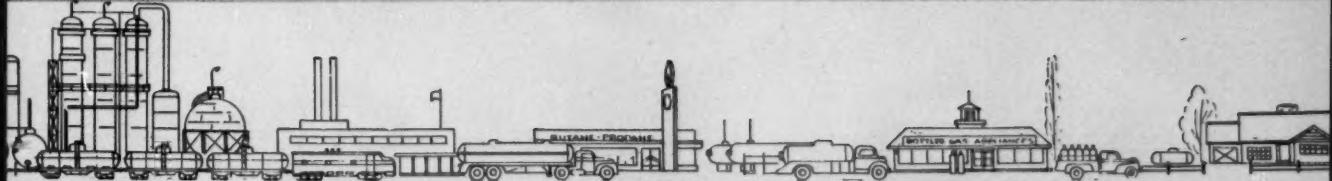
AMARILLO, TEX.—First Nat'l Bank Bldg.
ATLANTA, GA.—1428 West Peachtree Street,
Station "C" P. O. Box 7313
CHICAGO, ILL.—7 South Dearborn St.
DENVER, COLO.—1375 Kearney St.
DES MOINES, IOWA—6th Floor, Hubbell Bldg.

HOUSTON, TEX.—6910 Fannin Street
INDIANAPOLIS, IND.—3839 Meadow Drive
KANSAS CITY, MO.—201 E. Armour Blvd.
MINNEAPOLIS, MINN.—215 South 11th St.
NEW YORK, N.Y.—80 Broadway
OMAHA, NEB.—3212 Dodge St.

RALEIGH, N. C.—401 Oberlin Road
SALT LAKE CITY, UTAH—68 South Main
ST. LOUIS, MO.—4251 Lindell Blvd.
TAMPA, FLA.—3737 Neptune St.
TULSA, OKLA.—1708 Utica Square
WICHITA, KAN.—501 KFH Building

HIGHLIGHTS

BPN



The vigor of the current business expansion is clearly indicated in the latest figures released by the U. S. Commerce Department. Business activity is at a new high, substantially in excess of that reached at the peak in 1957. Gross national production in April exceeded the previous record by over 1 per cent. Retail sales for the month were up 9 per cent over last year and durable goods were selling 20 per cent over last year.

Gas appliance sales reflect this recovery. Gas dryers led the April sales parade with a 125 per cent increase over April '58 and a 58 per cent increase for the first four months. Built-in gas ranges were not far behind, 94.6 per cent over April 1958, and 63.3 per cent over the first four months of '58. Ranges, as a whole, were up 13.2 per cent in April, 14.4 per cent for the four months. Automatic gas-fired hot water heaters showed marked rises, with increases of 18 per cent for April and 17.7 per cent for the first four months.

Also running at an accelerated pace, heating sales are beginning their annual summer rise. Gas-fired central heating equipment sales in April were up 40.9 per cent over April 1958, and for the first four months were 32.6 per cent over the same period in '58. Hottest item in the gas heating field was the furnace, up 51.9 per cent in April and 40.7 per cent for the four months. Other April heating sales increases over last year: boilers, 20.3 per cent; direct heating equipment, 36.1 per cent; vented recessed wall heaters, 27.8 per cent; unit heaters and duct furnaces, 17.9 per cent; and floor furnaces, 8.6 per cent.

Many LPG companies showed equally spectacular growth. Among them was Petrolane Gas Service Inc., great growing giant of the West. From the firm's Long Beach, Calif., headquarters came word in early June that first quarter sales were up 40 per cent over the same period last year and net income and earnings per share were both up 36 per cent. Days later, Petrolane announced that it had acquired four more plants, located in eastern Wyoming, bringing its total to 117 plants. Three, at Lusk, Torrington, and Newcastle, were operated as Wyoming Gas Service. The fourth, a consignee at Moorcroft, will continue as Ed's Gas Service.

An important breakthrough by AGA researchers demonstrated dynamic progress of a different sort. On June 1, AGA announced its laboratories in Cleveland had completed a demonstration model gas forced-air furnace which generates its own electricity to operate the circulating fan. Employing the thermoelectric principle, the small scale prototype is entirely self-contained and requires only gas for operation. Availability of commercial units is not expected for some years.

A dramatic development now ready for the consumer is the Dial-a-Magic oven control on the 1960 Magic Chef gas range line. Previewed at the June Home Furnishing Show in Chicago's Merchandise Mart, the control calculates the time needed to roast a particular piece of meat and automatically turns on the oven at the proper time to have the roast ready at a specified hour. The homemaker merely dials the time for dinner, the kind of meat (beef may be rare, medium, or well done); and the weight of the roast. Then the Magic Control Center takes over.

Continued

HIGHLIGHTS

Appliance news of major importance was the early-June announcement by the Norge Div. of Borg-Warner Corp. that by the end of the month it would be field testing a new gas refrigerator. President Judson S. Sayre said: "If all goes well, we'll be in mass production and marketing it nationally by mid-fall." Norge is also introducing a combination gas washer-dryer in the fall.

Also aimed at the consumer, the National LP-Gas Council's big Sweepstakes is reportedly generating more enthusiasm than any previous Council promotion. With a \$25,000 all-LPG home as top prize, the event runs from August 1 to September 30. Many dealers are tying in their own local sweepstakes, local advertising, etc. In another Council development, Leigh Atkinson, second in command at the national office, moves to Los Angeles to take over the joint public relations program of the National Council and the Western Liquid Gas Association.

Sad news to the LPG industry was the June 9th death of Albert L. Walters, west coast secretary of LPGA and managing director of WLGA. Mr. Walters suffered a fatal heart attack in Portland, Ore., after concluding work on the Northwest LPGA District convention.

The proposed code for the installation of gas appliances and piping in buildings is now an American standard, following its adoption at a meeting in Atlantic City in June. The new standard combines for the first time the utility industry's Z21.30 code, published by NFPA as Pamphlet 54, and the LPG code, published as Pamphlet 52. The latter will now be discontinued.

A bright promotional idea in more ways than one was the all-gold stove produced by Phillips & Buttorff Corp., Nashville, Tenn., to celebrate the firm's 100th anniversary and its seven-millionth unit. Every tiny surface of every minute part was finished in gold. Total cost of the unit--\$3000!

Production of LPG in March (the latest month for which Bureau of Mines figures are available) was up 3 per cent over the previous month. Total production for the month was 934,486,000 gal. Stock on hand was 559 million gal., 166 million gal. above one year ago. Underground stocks were up 99 million gal. to 375 million gal.

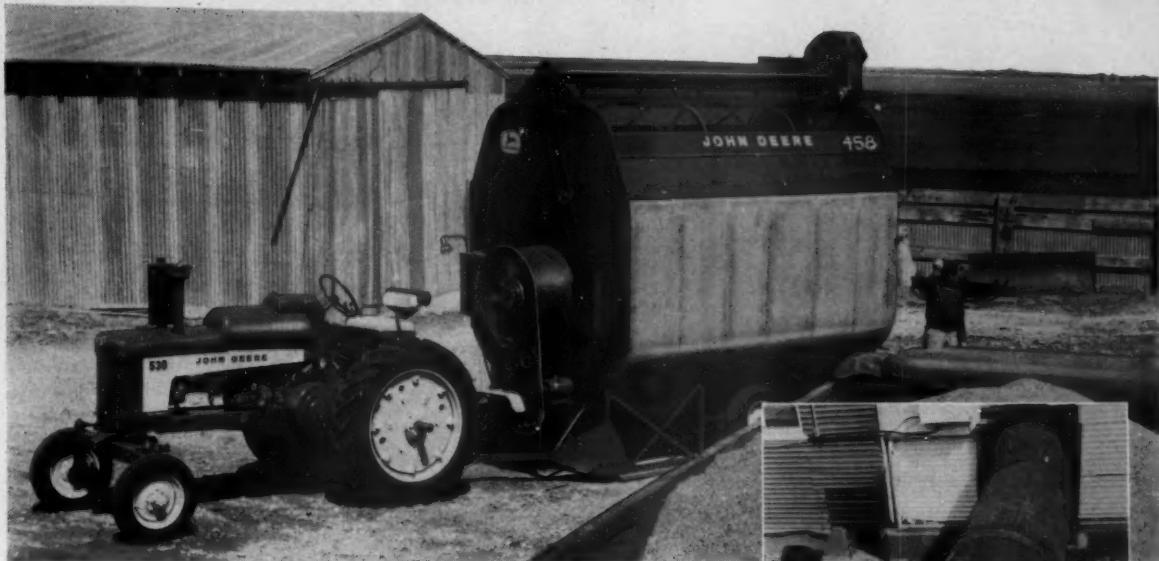
The nation's largest single LPG cavern is under construction in southwestern Illinois. Located at Shell Oil's Wood River refinery, the huge subterranean facility will accommodate 425,000 gal. of LPG at a depth of 450 ft. It is Shell's first underground mined storage cavern.

LPG shipments will be nearly doubled at its Bainbridge, Ga., river-front barge terminal, according to General Gas Corp. of Baton Rouge, La. The increase will amount to approximately 14-million gal. annually, bringing total annual volume to 30-million gal. Placed in operation early in '58 with one barge and 720,000 gal. storage, the facility is scheduled to get its fifth barge soon and now has over 1-million gal. storage.

The gross weight limit for trucks in Texas will go up to 72,000 lb., January 1. Gov. Price Daniel signed a bill authorizing the new maximum after an unusual all-day hearing he personally conducted.

Into the gasoline station business goes Arkansas Louisiana Gas Co., the large, new-horizon-seeking southern utility and veteran producer of motor fuels. For the story on this important development, see page 66.

How JOHN DEERE helps bring LP-Gas to the Farm



First "Full-Line" Crop Dryers Promote *Push-Button Sunshine*

When you encourage crop drying, you take a big step toward balancing your distribution load and introducing LPG for other farm uses. Now, John Deere Crop Dryers, along with tractors, combines, cotton pickers, and irrigation engines, are introducing more and more farmers to the convenience and efficiency of this modern fuel. Here are some reasons why you can recommend them:

Every farmer wants to "make hay while the sun shines." The same principle applies to most other crops. Early, high-moisture harvest plus artificial drying pays, in normal as well as wet years. It takes away risk, loss, and discomfort; adds security, convenience, and profit.

Drying makes sense, when you're sure. And the new John Deere Crop Dryers, first to be made and backed by any full-line farm implement company, provide that assurance. They set a standard of safer, easier, more dependable operation that many have waited for.

The batch-type 458 Grain Dryer, for example, features a unique blending system and unmatched fan performance for fast, uniform drying . . . full thermostatic control . . . electronic flame safeguard system . . . indicator-light panel . . . top-quality "plumbing" . . . low power requirement.

The 88 Portable Crop Dryer, a versatile heat unit for drying ear corn, hay, peanuts, or grain in wagons or suitable structures, has the same fan, burner, and controls—plus three spark-arrester screens.



JOHN DEERE

"WHEREVER CROPS GROW, THERE'S A GROWING DEMAND FOR JOHN DEERE FARM EQUIPMENT"

SEND FOR FREE LITERATURE

John Deere • Moline, Illinois • Dept. C-104

Please send free literature: Drying Crops with Pushbutton Sunshine 458 Grain Dryer 88 Portable Crop Dryer LP-Gas Tractors.

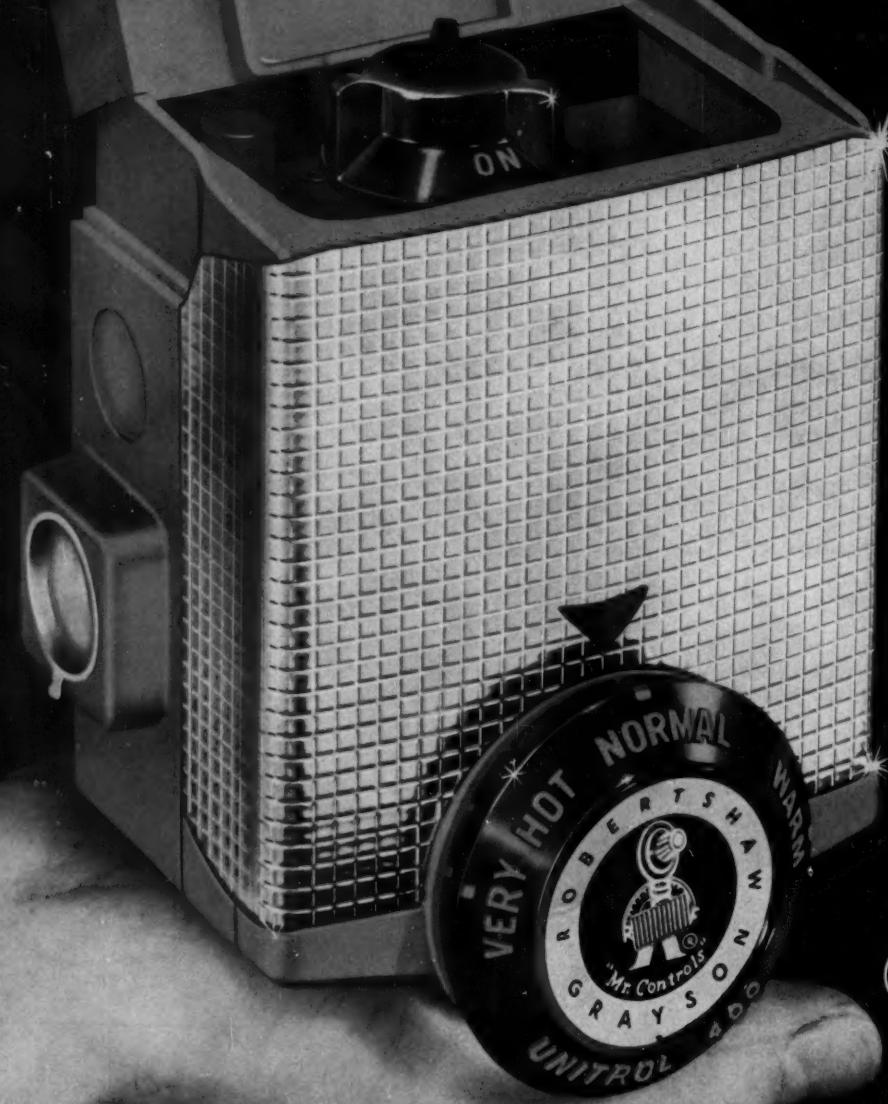
Name _____

R.R. _____ Box _____

Town _____

State _____

dramatic
exclusive control-



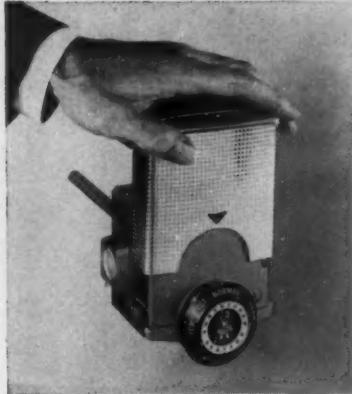
REPLACEMENT OR REFUND OF MONEY
Guaranteed by
Good Housekeeping
IF NOT AS ADVERTISED THEREIN

ROBERTSHAW UNITROL 400R provides a new, selling feature you never had before...

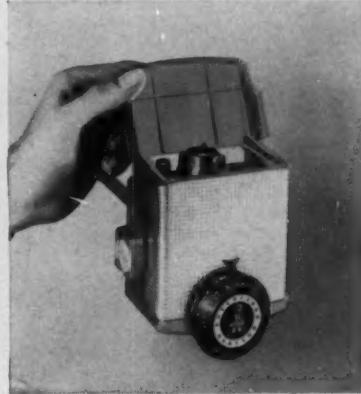
.....DEMONSTRATION



DEMONSTRATE the most beautiful control in the world!



DEMONSTRATE the exclusive new slip-top cover!



DEMONSTRATE the exclusive new flip-top lid!

Show customers the Unitrol 400R with the slip-top cover and the flip-top lid... *for greater water heater sales*

Equip your water heater with the control which will help sell it... the new Robertshaw Unitrol 400R! The lid flips up, and the whole cover slips off for easy pilot lighting. Here is a control your sales people can *demonstrate* to customers... here is a control which will enhance your water heater's ability, utility, recovery capability (the Robertshaw Unitrol 400R features a built-in pressure regulator) and reliability!

The Robertshaw Unitrol 400R will help you sell your top line water heaters or raise the sales of lower priced heaters!

FOR MORE INFORMATION CONTACT:

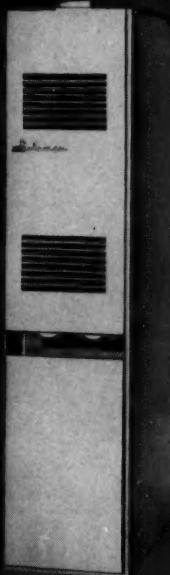
Robertshaw

GRAYSON CONTROLS DIVISION • LONG BEACH, CALIFORNIA

Now America's only bonded line of home heating and air conditioning is bigger and better than ever.

next to the
furnace itself,
Coleman's
bond does your
best selling

Coleman



The Coleman Company, Inc./ Wichita 1, Kansas

COLEMAN'S EXCLUSIVE \$500 WARRANTY BOND*



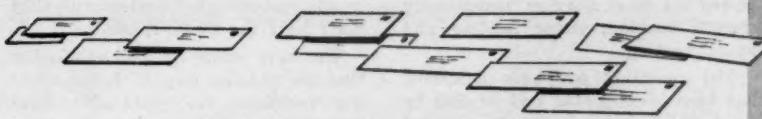
UTILITY ROOM

CLOSET

BASEMENT

*Issued by Travelers Indemnity Company of Hartford, Connecticut

Now America's only bonded line of home heating and air conditioning is bigger and better than ever. Next to the furnace itself, Coleman's bond does your best selling. The Trim Bond™ furnace shown above—in sizes from 80,000 to 160,000 BTU input—spares no quality with a quiet-voiced blower and unequalled performance. Designed with air conditioning in mind—now or later. Call your Coleman distributor or write.



Letters



Gasometers

Israel

We are interested in information about gasometers for L. P. gas.

J. E.

There are at least four companies in our country who can supply gasometers. They are: American Meter Co., Inc., 13500 Philmont Ave., Philadelphia, Pa.; Rockwell Manufacturing Co., 400 N. Lexington Ave., Pittsburgh, Pa.; Neptune Meter Co., 19 West 50th St., New York; and The Sprague Meter Co., 35 South Ave., Bridgeport, Conn.

We are writing each of the above companies and requesting them to send their descriptive literature to you.—Ed.



Expansion qualities of commercial propane

Illinois

Our question concerns the expansive qualities, due to temperature variations, of commercial propane. We know that at 60 deg. F. the specific gravity is approximately 1.52 (air), and that there are about 36.3 cu ft of gas per gal. of liquid.

How are these properties affected and at what rate through a range of -44 to 120 deg F?

We are curious in respect to the metering of propane as a gas and what effect these variables have on engines operating on vapor only.

M. H. L.

The expansion and contraction of propane vapors due to temperature change follows Charles law which states: ". . . the volume of a given mass of gas is directly proportional to the absolute temperature if the pressure is fixed." Propane is not considered a "true gas," but for practical purposes follows the above gas law close enough.

The absolute temperature in the Fahrenheit system is 459.6 deg. (usually rounded off to 460 deg. F) to the temperature as measured in degrees Fahrenheit. Then 60 deg. F is 520 deg. absolute, -44 deg. F is 416 deg. absolute and 120 deg. F is 580 deg. F.

Stated mathematically the above law may be written as follows:

$$\frac{V_1}{V_2} = \frac{T_1}{T_2}$$

Let: $V_1 = 36.3$ cu ft, or the volume at standard temperature

$V_2 = \text{volume at temperature } T_2$

$T_1 = \text{initial temperature or } 60 \text{ deg. F, } 520 \text{ absolute in this instance}$

$T_2 = \text{final temperature at which volume is desired.}$

Then rewriting $V_2 = V_1 T_2 / T_1$

$$\frac{V_2}{T_1}$$

and if we substitute 120 deg. F or 580 deg. absolute for

$$T_2 = 36.3 \cdot 580$$

$$520 = 41.5 \text{ cu ft}$$

or if T_2 is -44 deg. F

$$V_2 = 36.3 \cdot 416$$

$$520 = 29.0 \text{ cu ft}$$

Note that the above volumes are measured at constant pressure, which in this case is considered atmospheric pressure at sea level.

The specific gravity would remain 1.52 compared to air at the same temperature. If you try to compare the specific gravity of the gas at one temperature with that of air at some other temperature then the relationship does not hold. The propane vapor and also air is more dense (heavier per unit volume) at lower temperatures.

The weight of pure propane per cu ft measured at 60 deg. F is .1162 lb while air is .0764 lb. At 32 deg. F the weight per cu ft is .1230 lb for propane and .0806 for air. A gallon of propane weighs 4.23 lb and produces 36.3 (approximately) cu ft of vapor at 60 deg. F. However, if the vapor is warmed to 120 deg. F, it ex-

pands to 41.5 cu ft; and if it is cooled to a -44 deg. F, it contracts to 29.0 cu ft. But the mass or weight remains 4.23 lb.—Ed.



Varied uses of weed burners

New Brunswick, Canada

Kindly advise whether it is possible to obtain weed killers, operated by propane, and whether or not they will hook onto the rear of a tractor.

J. E. C.

We believe the weed killers operated by propane which you are thinking about are the various types of "flame weeding" devices. Many of these can be towed back of a tractor, fastened to a truck bed, fastened to cultivators or even operated by hand.

Some specialized units are for alfalfa burning or weeding in which weeds and insects are destroyed with little harm to the alfalfa. Units are available for strawberry "cultivation," fence row or ditch burning, row crop cultivation, and many other services.

For companies which manufacture this equipment see advertisements and listings in this magazine and the BPN Catalog.—Ed.



Discoloration may come from any fuel

Wisconsin

What might be causing a yellow deposit on the walls and draperies in a home heated by a forced air furnace? This deposit is also noted on linens and white clothes in drawers and closets. It is not

an oily or greasy stain, it wipes off the walls cleanly and it is as easily washed out of the clothing as ordinary soil.

The heating plant is an LPG furnace, ducts to all rooms. This furnace has been checked for efficiency, CO_2 and leaks. We can find nothing wrong with it and it is my belief that the furnace is not causing the trouble. This belief is further strengthened by the fact that we have an identical installation in an identical home next door and they are not having any trouble.

J. F. B.

The condition you have encountered comes to our attention frequently, and lest "Ready Kilowatt" gets any bright ideas, we have received the same story in homes using electric cooking, water heating and space heating.

The condition you have described has been investigated and studied by laboratories and scientifically minded personnel. No evidence has been uncovered to indicate that the trouble was caused by the products of combustion from gas-fired appliances.

You have checked for leaks in the combustion chamber and vents and

state that you have not found any. Even if there was some leakage we doubt if it would cause the discoloration you mention. We know of homes which use unvented heaters and they don't have the above trouble.

We have come to the conclusion that the troubles may be due to cooking conditions, the types of cooking materials used and to certain other conditions of ventilation and air circulation.

One housewife may fry more than another and may cook at higher temperatures, which will cause more fatty or oily substance to be volatilized into the air. One may use a cooking oil or fat that has a lower distillation range. When oily vapors contact a cool object they condense and cling. Then fine dust comes along and sticks.

Ventilation and circulation of air within the house is also important. New houses are much tighter than old ones. If there is no chance for air to enter, fumes will not be exhausted, even though a vent fan may be used. The location of vents or windows, etc., may have a bearing.

Even smoking can help cause discoloration. Possibly still another factor is causing the trouble.—Ed.



the name that means PROFITS



FOR YOU



Here's how TRUFLAME is helping to get extra business and profit for Sinclair LP-Gas distributors.

- TRUFLAME adds prestige and confidence.
- TRUFLAME puts distributor in a better competitive position.
- TRUFLAME 50/50 Advertising Plan doubles advertising impact at no extra cost.
- TRUFLAME stands for high quality and dependable service.

Write or call today for information about Sinclair's progressive program that is helping distributors make more money.

*TRUFLAME is Sinclair's Registered United States Patent Office trademark for its superior quality LP-Gas.

**S I N C L A I R
O I L & G A S C O M P A N Y**

LIQUEFIED PETROLEUM GAS SALES DEPARTMENT

SINCLAIR OIL BUILDING — TULSA 2, OKLAHOMA

Telephone LUther 4-0411



Seals used to protect cylinders

Michigan

We are having trouble with our customers taking tanks from us and having them filled elsewhere.

Years ago some company made and sold a unit that would fit over the POL nut and then back on the tank valve a short way. They ran a small wire through it to seal it off so a customer can't remove the tank unless the seal is broken.

Please advise where we can get these.

C. M.

We do not know who made the sealing device which you describe in your letter. We know of a locking cap that was made for the filler valves on domestic tanks, but they will not work on the POL nut and cylinder valves. Possibly some of our readers know about the device.

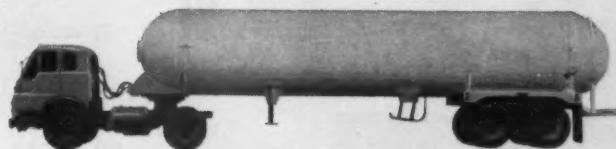
I believe you could make a satisfactory seal arrangement with the wire and lead seal arrangement with which electric meters are sealed. The wire can be wrapped once or twice around

Unbeatable combination:

**T-1
STEEL
and
MISSISSIPPI
TANK
ENGINEERING!**

The fact that many Mississippi Tank T-1 Steel units have already more than paid for themselves in extra payload carried is now proven by owners' records. The high tensile strength of T-1 Steel permits the use of thinner shell plates, and its weldability results in better constructed, stronger units.

Pioneering in the use of T-1 Steel for LP Gas hauling equipment gave Mississippi Tank the experience and skill that make our transports and deliveries the finest money can buy. Plan now to convert to Mississippi Tank T-1 Steel units and **make more money next season!**



T-1 Titan Delivery

With a capacity of 3,075 water gallons, the Titan is the largest single axle delivery on the market today! 76½" inside diameter tank is fully X-rayed and sand blasted. Many low-cost options for high-profit operation.

**Let us show you how T-1 Steel equipment can pay for itself
in a matter of months. Just use the Coupon . . .**

*All Mississippi Tank Units are
fabricated according to latest
ASME Code, and ICC Specifications.*



**MISSISSIPPI
TANK COMPANY**
INCORPORATED
HATTIESBURG, MISS.
JUNiper 3-0262

MISSISSIPPI TANK COMPANY, INC.

Hattiesburg, Miss.

Show me how T-1 Steel can pay for itself in a matter of months. I
operate (check one or both):

Deliveries Transports

Also send literature on units checked above.

COMPANY _____

NAME _____

ADDRESS _____

CITY and STATE _____

the connector tube and snugged up against the POL nut, then wrapped around the POL valve and sealed. Anyone trying to disconnect the cylinder will be forced to break the wire.

Check with one of the local utility companies near you and see what they have. The sealing strips used on freight cars might prove adaptable, but I do not think it would be as easy to wrap around the adapter as the wire type.

Some companies which manufacture wires, seals and other devices for sealing meters, locks, and other equipment are: American Seal Co., 271

North California Ave., Chicago, Ill.; Chicago Car Seal Co., 630 N. Western Ave., Chicago, Ill.; Hall Bros. Co., 303 West 5th, Kansas City, Mo.—Ed.



Why wouldn't the armed services use LPG

Mexico

I have been asked by the War Department in Mexico whether the U. S. Army, Air Force or Navy is

using, or experimenting with, butane-propane carburetion.

It is my understanding that the Army at one base or camp located somewhere in Texas has been experimenting with butane carburetion in tanks and motor vehicles with excellent results.

Can you give me any information on this?

C. R. H.

We do not know of any military installations that are using or experimenting with L. P. gas for powering any type of vehicle.

We understand the U. S. Postal Service was testing it on some equipment in Texas, but we have no information where or the extent and nature of the tests.

Maybe some of our readers have definite information and will be willing to tell us where L. P. gas is being used or tested on Armed Services or other government-owned motor equipment.—Ed.



Wants non-sticking plug valve

Texas

We would like to have information on a non-sticking plug valve. We are interested in a two- and three-way valve, size $\frac{3}{4}$ and 1 in.

T. A. R.

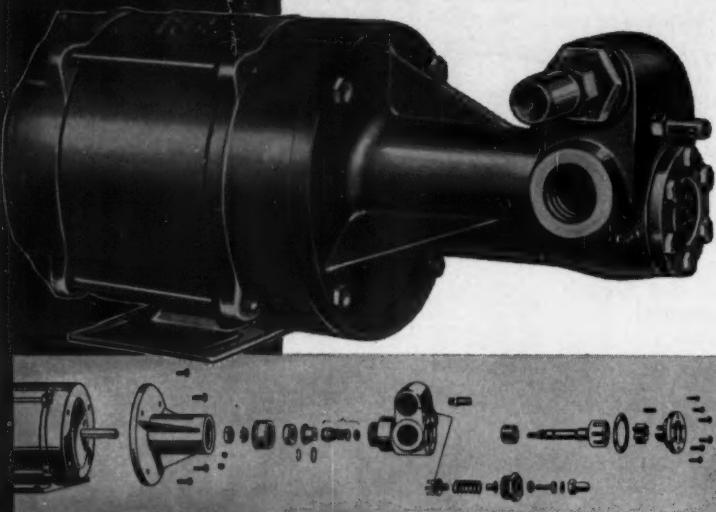
There are several companies which manufacture lubricated plug valves, which, when properly maintained and lubricated, should not stick. The proper lubrication as recommended by the valve manufacturer should be used. Much of the trouble encountered with sticking plug valves is due to lack of lubrication or use of the wrong lubricant for the product handled.

The names of the manufacturers are: ACF Industries Inc., 30 Church St., New York, N. Y.; Rockwell Manufacturing Co. (Merco-Nordstrom) 400 North Lexington Ave., Pittsburgh, Pa.; The Wm. Powell Co., 2525 Spring Grove Ave., Cincinnati, Ohio; Walworth Co., 60 East 42nd St., New York, N. Y.

We believe the Homestead Valve Manufacturing Co., P. O. Box 348, Coraopolis, Penna., manufactures a non-lubricated plug type valve that has a mechanism to release the plug so it can be turned easily, then reseated.

Also the Rockwood Sprinkler Co., 38 Harlow St., Worcester 5, Mass. manufactures a line plug valve but not a three-way type valve.—Ed.

top VIKING Quality Clear Through



VIKING
MODEL FH696
LP-GAS
Fueling Pumps
for farm tractors
and trucks



FOR DETAILS, WRITE FOR BULLETIN SP479B

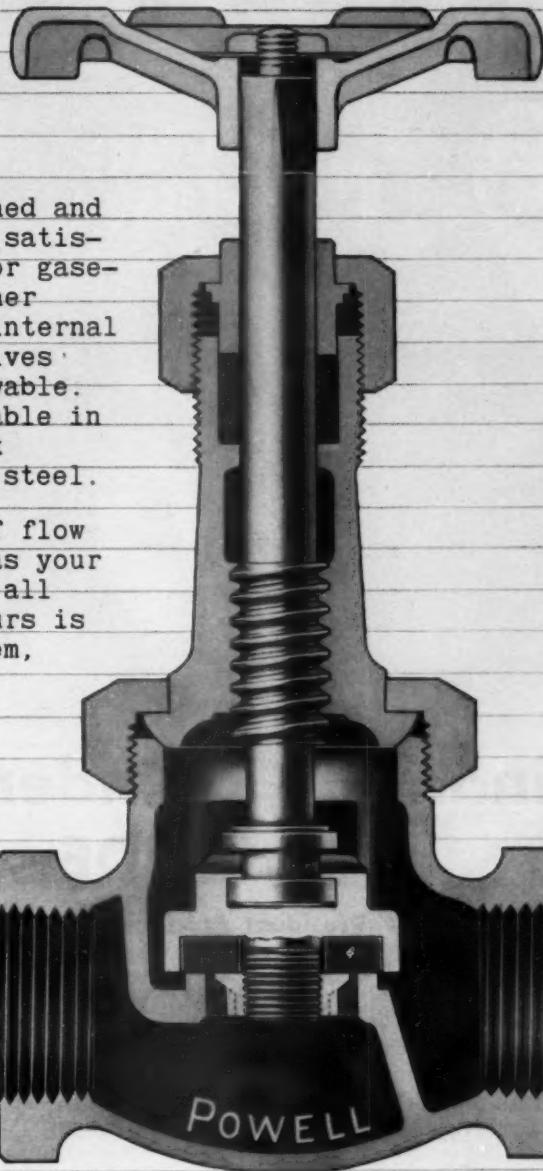
VIKING PUMP COMPANY

Cedar Falls, Iowa, U. S. A. In Canada, it's "ROTO-KING" Pumps

See Our File in Butane-Propane Catalog

POWELL LPG VALVES

for the Safe Handling of Butane and Propane Gases



Powell LPG Valves are designed and engineered for the safe and satisfactory handling of liquid or gaseous Butane, Propane, and other Hydrocarbons. The trim and internal working parts of all the valves are easily and quickly renewable. Powell LPG Valves are available in Globe, Angle, Gate and Check Patterns in both bronze and steel.

A solution for every kind of flow control problem is as near as your local Powell distributor in all principal cities. Or, if yours is a special engineering problem, write to us.

THE WM. POWELL COMPANY

Dependable Valves Since 1846

CINCINNATI 22, Ohio

Fig. 8150—Bronze L.P.G. Globe Valve (Sectional) for 400 lbs. W.O.G. Union bonnet, special composition disc, integral seats.

(Listed by Underwriters' Laboratories, Inc.)

POWELL... world's largest family of valves



"Financing cylinder purchases with LINDE saved us money"

says John Rose, President, Propane Industrial Service, Willoughby, Ohio

"With the help of LINDE's financing plan, we were able to multiply our business several times in three years and we don't see a limit yet. Financing cylinder purchases with LINDE saved us more money than any other lease or purchase plan we ever heard of. It means we get the best cylinders at the lowest possible cost."

Mr. Rose has his largest investment in LINDE's PREST-O-LITE lift truck cylinders. Like all LINDE cylinders, they're built to last. One seam, not three, for light weight and high strength. Footring designed, constructed, and coated to prevent rust, and curled

for strength and protection. The handhole is curled, too, for a comfortable grip.

Be sure to get the facts on how LINDE's Credit Plan can help you expand your business. Write Dept. XX-00, Linde Company, Division of Union Carbide Corporation, 30 East 42nd Street, New York 17, N.Y. *In Canada: Linde Company, Division of Union Carbide Canada Limited.*

"Linde", "Prest-O-Lite"
and "Union Carbide"
are registered trade marks
of Union Carbide Corporation.

Linde

**UNION
CARBIDE**

BUTANE-PROPANE News

WASHINGTON REPORT

by NEIL RECEIMBAL, *Washington Editor*



**Defeat of
REA reorganization bill
won't slow
power co-op subsidization**

★ THE MOST POSITIVE RESULT of Congress' failure to override President Eisenhower's veto of the REA reorganization bill will be a general slow down of Congressional drives for big spending and radical legislation. The vetoed measure was a political test and the lawmakers failed to prove they were in the driver's seat. On the other hand, it is now apparent that there are enough congressmen who favor subsidizing rural electrification co-ops to block any efforts of the current administration to boost the present 2 per cent interest rate for REA loans.

**Federal fair trade bill
clears one hurdle,
still faces
tough battle ahead**

★ THE CONTROVERSIAL FEDERAL FAIR TRADE BILL sponsored by Rep. Oren Harris (D.), Ark., chairman of the House Commerce Committee, has been approved by that committee despite strong opposition from unions, farm groups, and the government's anti-trust agencies. The Harris bill would replace present state fair trade laws with a federal law. Fair trade is currently in effect in only 29 states.

**Extension of
minimum wage-hour law
has good chance to pass
in 1960**

★ A NEW MINIMUM WAGE LAW could well be passed in 1960, Congressional experts believe. As originally introduced by presidential aspirant John F. Kennedy, Democratic senator from Massachusetts, the bill would extend present minimum wage laws to cover an additional 7.8 million workers and would boost the minimum wage to \$1.25 per hour.

**Home construction
sets record pace,
should move even faster
if housing bill passes**

★ A RECORD 137,000 HOUSES started in April boosted home construction for the first four months of this year to a new record of 433,000 houses. If continued at the March-April rate, new home starts for 1959 could total 1.4 million units; and if Congress passes a pending housing bill that would ease the present tight money situation, the building boom might accelerate even more.

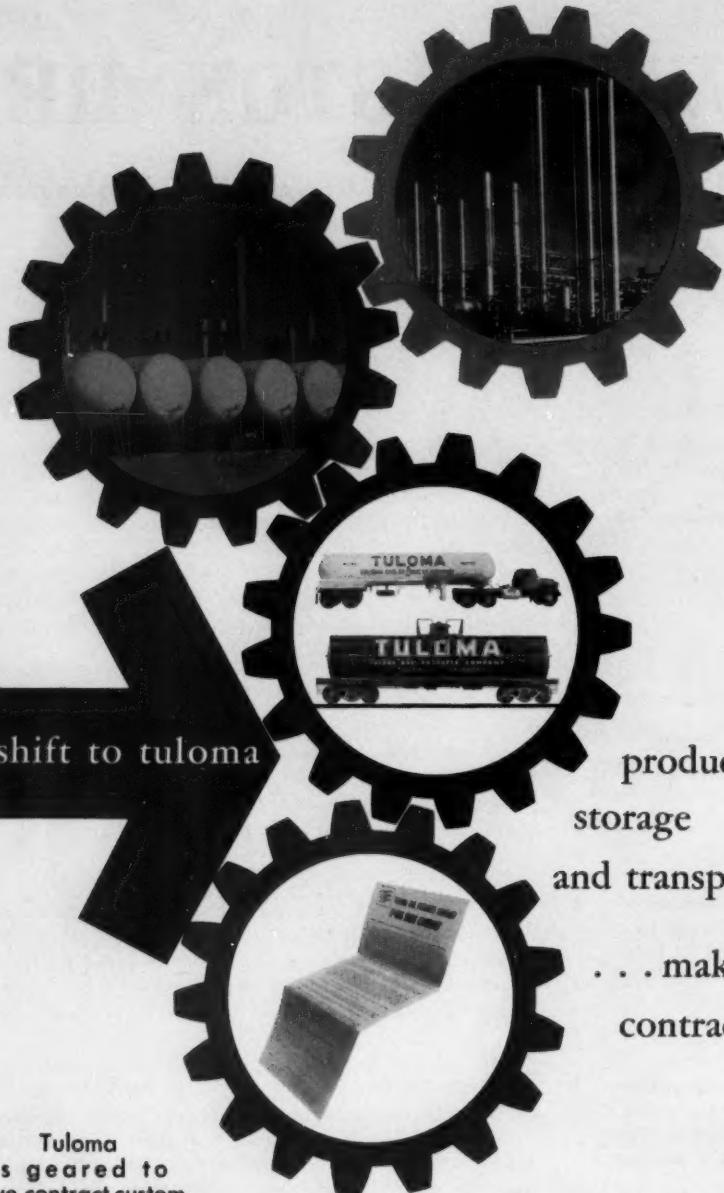
**Farm income
expected to
decline from '58,
will still top '57**

★ NET FARM INCOME IS EXPECTED TO DECLINE 8 per cent, or \$1 billion, this year, but still should total about \$12.1 billion, or \$1 billion above 1957. Sales of crop-producing items should remain fairly constant, but new appliances and equipment may be harder to sell.

**Money for
small business loans
is scarce,
encourages fee racket**

★ SMALL BUSINESSES ARE APPLYING for government-guaranteed loans at a rate that threatens to run the Small Business Administration out of money. The SBA is asking Congress for more money and a remedial bill is pending in the House. Meanwhile, a Senate investigating committee has uncovered a new racket—small businessmen are paying as much as \$30 million a year to help them borrow money. In most cases, the businessman pays an advance fee of \$150 to \$2000 to have his already-rejected loan application re-presented in routine fashion for another routine rejection.

(Details on pages 72-74)



...shift to tuloma

production,
storage
and transportation . . .

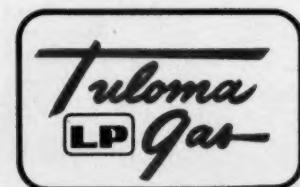
... make satisfied
contract customers

Tuloma
is geared to
serve contract custom-
ers with complete and
dependable service....To
become the most import-
ant part of our fast mov-
ing, highly efficient or-
ganization—write, wire
or call Tuloma
today!

TULOMA GAS PRODUCTS COMPANY

Pan American Building • Phone CHerry 2-3261 • Tulsa, Oklahoma

DISTRICT OFFICES: Williamsburg, Virginia • Moorhead, Minnesota •
Salt Lake City, Utah • Billings, Montana • Des Moines, Iowa • Russell,
Kansas • Houston, Texas • Midland, Texas • El Dorado, Arkansas



Beyond the Mains

With WILLIAM W. CLARK • Editor



Business is where you find it

ARE YOU A BIG-LOAD DEALER OR A LITTLE-LOAD DEALER—OR AN ALL-AROUND DEALER?

There's a place in this industry for all three. But sometimes we wonder if, so far, most dealers haven't just decided to settle in one of the first two categories, and let it go at that.

The trends in dealer organizations are pretty well-known. First, there was the little-load dealer—the man who served gas in "bottles" for the basic domestic loads—cooking and water heating, or maybe cooking only. Then there was the big-load dealer, and chronologically—generally speaking—he came along later. Suddenly he found that he could take over the househeating business, or he could move into the power field and capture the big tractor load. It had a lot of the advantages that go along with "volume selling."

At this point, what happened to his cylinder business? Roy Johnson, vice president of Fuelane Corp., speaking before an LPGA convention session, said he had heard of "some operators who are no longer seeking or attempting to serve a domestic customer who uses gas only for cooking." We assume that, for a "big-load" dealer, that kind of a customer is a pain in the neck.

Well, that may be true, but today's cooking customer is frequently tomorrow's househeating customer. And we don't necessarily mean for gas. Mayhap for electricity. We have noted in recent weeks a steady inpouring of mail from dealers wanting to know more about how to combat electric heat. In many areas it has them worried. If they've let the old-style base loads go to the competition, can househeating be far behind?

There's room in this industry for all kinds

of dealers—and it takes all kinds. There's the big dealer with cylinder loads, and the little dealer who can empty a bob-tail before he's filled a dozen customers' tanks. There's the specialist who has no time for anything but fork lift trucks. One of the most successful dealers we know (and envy) sells to nobody but plumbers. But the specialists are located where the market is most concentrated. Most dealers still must have *some* diversification to live and to grow.

Why not *more* diversification? What's the matter with handling torches, for example? Or campstoves or lanterns or cylinders for boats and mobile homes? Or infra-red heaters or salamanders or plumbers pots or braziers or luau torches?

In this business, as in every other business, one sale can lead to another. A boat owner who learns to use LPG is a potential domestic customer. People caught in a storm without electrical utilities will come to you for a lantern to light their homes with, a torch to cook their food with (it's happened!). Next week they might buy a gas range—from you. If your town has no sporting goods store (it's been proved that most small towns won't support one), campers will come to you for lanterns and cookstoves.

Gas—and particularly LPG—is a fuel with a thousand uses. There's enough variety in available gas burning equipment to stock a small department store. There are, as Mr. Johnson pointed out, plenty of small-volume uses that are potentially profitable. Don't let the forest obscure your view of the small saplings. Together, they can add up to a lot of timber.



for action!

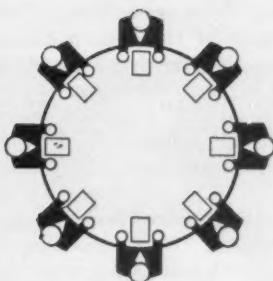
Just call...

PHONE: LUTHER 4-1421 ENTERPRISE BUILDING TULSA, OKLAHOMA

PRODUCERS OF: BUTANE • PROPANE • NATURAL GASOLINE



BPN Editor Bill Clark (standing) opens the Roundtable session. Shown (left to right) are: Lauren Nichols, BPN Publisher Frank Chapman (partially hidden), Clark, George McFadden, John Rose, BPN Representative Bill Smyth, and BPN Eastern Editor Bill Harper. Hot and humid weather prompted the shirt-sleeve atmosphere.



An LPGA Convention highlight—

BPN's 8th Sales Roundtable

WILLIAM T. HARPER • Eastern Editor

THE difficulties imposed by the new automatic range ignition requirements were spotlighted by both dealers and manufacturers during the eighth Sales Roundtable sponsored by BUTANE-PROPANE News at the Lake Shore Club in Chicago, May 2. Management and movies, progress and products were only a few of the other subjects discussed by the 40-odd participants in the session, which was conducted by BPN Editor William W. Clark.

An indication of the value and the amount of interest generated by these sessions is shown by the number of miles traveled by the dealers, producers and manufacturers so that they could attend. The 49th and 50th states were about the only areas without representation. LPG men came from such scattered points as New York City; Arcata, Calif.; Denton, Texas, and Charleston, S. C.

Editor Clark got the meeting underway with a



"We have been very curious about dealer and distributor reaction to the automatic ignition program" . . . Dick Freiermuth.

heavily loaded question: "What have been your findings after five months of working under the range ignition requirements?"

Richard H. Freiermuth, speaking for the Phillips Petroleum LPG Appliance Sales Division, was the first to answer, and he did so with caution. "We have been very curious," he stated, "of the reaction we would get from our distributors and through them our dealer organizations. . . . We have elected to merchandise only those appliances that do have fully automatic ignition, only AGA Blue Shield appliances for L. P. gas. But, we have not been getting too much reaction from the field level."

A different view was presented by K. H. Dickson, of Uregas Service Inc., Moberly, Mo.

"We're sorry that automatic oven ignition was delayed for two years or even that it was delayed at all. I think we've been kidding ourselves for years in not doing it and I know of no complaint from the field. Our range sales for the first three months of this year have been ahead of the first three months of last year."

Words of warning came from Ralph Sieben of Metrogas Inc., Chicago. "I am in support of the program," he stated. "But, I don't think that the manufacturers as such are supporting it as much as we in the LPG business. . . . Our sales people tell me that they're not sure we'll be able to carry the high price tags needed to maintain the volume that we'd like to keep in the range picture. . . . I say we'll go along as long as we possibly can; but we'll give it if it looks like we're going to be the 'goat' in the thing."

The pendulum swung back the other way again when Sam K. Wilson of the George D. Roper Corp., Kankakee, Ill., said, "We have felt very little from

this program. In fact, if our sales of the last two months are any indication, it possibly has acted as an advantage to us."

Thomas E. Thornhill of Seaboard Gas Co., Charleston, S. C., very neatly wrapped up this phase of the session. "The gas business in our area started off as a shirt-tail proposition," he recalled. "People started from the bottom and worked their way up until they got on their 'Sunday suit.' A pilot in the oven gives better service to the customer. It's just a little better 'Sunday suit.'"

Before Thornhill could sit down again, Editor Clark had him start off the phase of the session dealing with promotional activities. Tommy began by telling of some of the problems of "the little country folks down there in South Carolina." Before a recent changeover in his area to natural gas, he told how the entire gas industry was losing customers to electricity.

Thornhill and other members of the South Carolina LPGA approached this problem. "We figured that the best way to get to it was with the people who were practicing or being taught to be home economists, teachers, pupils, and so forth, in our state. So, we approached the Junior Homemakers' Association and sold them on the idea of our being on their state convention program at the women's college in South Carolina. For a number of years now we've put on some very fine cooking demonstrations.

"We are also giving to one white and one colored high school student, who is elected the outstanding student in her class, a \$250 scholarship to help her future education. We hope to increase that figure each year. But, those two little gifts have given our association the right to enter any high school in the

state and talk to those people about gas. It's just one of those little wedges, a foot in the door, that have helped us tremendously." Thornhill added several other items, showing that he had many more feet in the door.

Sam Wilson popped up again to tell of a motion picture that the Alabama LPGA has produced. He feels it "has done a tremendous job of promoting gas. They work it through Rotaries, Lions Clubs, service organizations, schools, any place where anyone showed any interest at all. I'm fairly sure it ran over 15 minutes and it was produced at a cost of less than \$2500."

Willard J. Rowlett of Whirlpool Corp., St. Joseph, Mich., added, "We have produced a film about the Miracle Gas Kitchen. It runs 12½ minutes and if you want to buy it, it costs \$103. But, if you'd like to use it in your organization for club purposes, ladies aids, or church groups, we have a number of prints available. All you have to do is to drop a note to our office in St. Joseph."

John F. Walsh of Waldorf Heater Co., Philadelphia, took the dealers' minds off the movies with a sobering story that showed sometimes the dealer, himself, is at fault for losing a gas load rather than all the factors he is apt to blame. A large eastern LPG distributor sent a man to find out why they were losing a load in a new home project area. The man took the local dealer out to meet a builder, whose reaction, according to Walsh, "was very interesting. 'You know,' the builder said, 'I knew this dealer's father. He was a personal friend of mine. But, in all the years that I've been building since this lad took over the operation of the business, he has never yet called on me to ask about putting gas equipment in my home. I'd be tickled to death to put it in but I'd be dog-goned if I'd go to him. It's up to him to come to me.'"

H. R. (Buck) Pemberton of Allen Butane Gas Co., Denton, Tex., spent the next few minutes telling

about the newspaper he publishes to promote his business, a story which appeared in the January issue of BUTANE-PROPANE News.

Ken Dixon, a former president of the LPGA, spoke at length on Uregas sales promotion activities. Throughout the widespread chain of Uregas dealers, annual sales campaigns are held, and valuable—as well as costly—prizes are given. Earlier this year, for example, 17 dealers and their wives were given a six-day expense-paid trip to the Deauville hotel in Miami, Fla. These men were tops among 228 dealers. The awards were made not on the basis of sales volume, but on the margins by which they exceeded their quotas. How much, Dixon was asked, do you spend on advertising and promotion?

"We spend 1.7 to 2 per cent of our gross dollar volume on advertising, plus all we can 'wheel and deal' out of any manufacturer. That money is spent on co-op advertising, radio, television, and things of that type. It does not include the manpower, or the space, or the equipment, but it does include the cost of the winners' trips.

"We have gone to great lengths to try to educate our people all the way on just how important sales promotion is."

Henry Norton of Kirk Industries Inc., N. Y. C., was up next to tell about his company's 10.2 cu. ft. refrigerator.

John V. Youngblood and Robert A. Washburn, both of H. C. Little Burner Co., San Rafael, Calif., spoke about Safety-Vent. Washburn, who "feels like a crusader for sealed combustion," called it "the change from the two-wheeled mechanical brakes of yesterday to the power brakes of today. It's a transitory period. . . . I think that it's highly important that the message of sealed combustion be brought out to dealers, distributors, and, particularly, to the consumers."

John J. Rose of Propane Industrial Service, Cleveland, told the group that "the first man who sells a customer usually will retain the business if he pro-



"We publish a newspaper to promote our LPG business" . . . Buck Pemberton.



"The automatic ignition program works to our advantage" . . . Sam Wilson.



"A pilot in the oven is like a better Sunday suit" . . . Tommy Thornhill.



Before the Roundtable, participants got together to compare notes. Shown (left to right) are: Frank Chapman, M. G. Cook, Bill Clark,



K. H. Dickson, Tom Ennett, W. A. Schuette, Walter Kraus, Dick Duffy, Roger Kelly, and Bud Love.



vides the most important thing—service."

Henry J. Henke of Harper-Wyman Co., Chicago, turned the group's attention to his company's school gas range program. "We have a five-year plan at our company wherein we install ranges in schools. We sell the range first to the dealer at 10 per cent of the distributor's cost. Then the range is installed in a home economics classroom. Each year for five years, the range is taken out and replaced with another new one. The old range is sold at cost. We put a tag on these ranges when we put them in the schools telling that it will be sold at the end of the school year. You'd be surprised at how many requests we get from people to try to buy those ranges. We feel this program has been very successful in getting over the gas range message to the future homemakers."

As has been the case at previous roundtables, the

subject of school range programs stimulated more discussion than any other single item. Many dealers still seem to be groping for a plan that will be effective, yet will not be a financial burden.

Ken Dixon popped up with a thought-provoking idea. "Shouldn't GAMA set up a school range program as an association-sponsored affair?"

Several dealers nodded in agreement, and the wheels could almost be heard turning in the heads of others. Henry Schaden of Carl Byoir & Associates, Chicago, representing the Byoir PR client, GAMA, was seen furiously scribbling notes on the subject.

Schaden, incidentally, openly solicited reactions from the dealers on the range ignition program. GAMA is vitally interested in knowing their reactions, since it's at the sales floor level that the requirement will get its most severe test. ■

The cross-section that represented the liquefied petroleum gas industry at the eighth BUTANE-PROPANE News Roundtable session:

M. G. Cook Rockwell Mfg. Co., Pittsburgh, Pa.
K. H. Dickson Uregas Service Inc., Moberly, Mo.
Tom Ennett Rockford Propane Co., Rockford, Ill.
Gaylen Frey Modern Equipment Co., Michigan City, Ind.
R. H. Froermuth Phillips Petroleum Co., Bartlesville, Okla.
J. I. Gorton Kirk Industries Inc., New York, N. Y.
R. M. Hemphill Hicksgas, Chicago, Ill.
H. J. Henke Harper-Wyman Co., Chicago, Ill.
J. M. Keefe Chief Gas Service, Urbana, Ill.
Roger Kelly, Jr. Columbian Steel Tank Co., Kansas City, Mo.
W. J. Kraus Bay Heat Inc., North Bend, Ore.
N. H. Lee Norco Inc., Los Angeles, Calif.
E. K. Love, Jr. Red-E Gas Co., St. Louis, Mo.
F. T. Lundin Dri-Gas Co., Hinsdale, Ill.
T. F. McCormick Dri-Gas Co., Hinsdale, Ill.
Gene McDonald E-Town Propane Inc., Elizabethtown, Ky.
G. M. McFadden Ohio Foundry & Mfg. Co., Steubenville, O.
L. H. Nichols Ascot Gas Water Heater Ltd., Cleveland, O.
M. R. Nordlund Rural Gas Service Co., Mexico, Mo.
Henry Norton Kirk Industries Inc., New York, N. Y.
H. R. Pemberton Allen Butane Gas Co., Denton, Tex.

J. J. Rose Propane Industrial Service, Cleveland, O.
Morris Rowles Calif. Liquid Gas Co., Sacramento, Calif.
Harry Schaden Carl Byoir & Associates (GAMA), Chicago, Ill.
W. A. Schuette Haugas Inc., Washington, Mo.
Ralph Sieben Metrogas Inc., Chicago, Ill.
T. E. Thornhill Seaboard Gas Co., Charleston, S. C.
Bruce Vogt Liberty Propane Co., Arcata, Calif.
J. F. Walsh Waldorf Heater Co., Philadelphia, Pa.
R. A. Washburn H. C. Little Burner Co., San Rafael, Calif.
S. K. Wilson George D. Roper Corp., Kankakee, Ill.
J. V. Youngblood H. C. Little Burner Co., San Rafael, Calif.

Representing BPN were:

F. M. Chapman, publisher, Los Angeles
W. W. Clark, editor, Los Angeles
W. T. Harper, Eastern editor, Philadelphia
Gilbert Bowman, promotion manager, Los Angeles
Howard Baird, Cleveland manager
Richard DeMuesy, Chicago manager
Richard Duffy, New York manager
William Smyth, Dallas manager



For old cylinders

LOST AND FOUND

LOST—THOUSANDS OF OLD "Pyrofax" gas 100-lb. "R" type cylinders which were to be retired due to their excessive weight and handling problems.

FOUND—BY PYROFAX GAS CORPORATION LABORATORY, a manifold system which utilizes "R" cylinders.



Six hole and hearty patients (old "R" type cylinders) testify to the effectiveness of the medicine prescribed by Pyrofax Gas Corp. engineers. The "RX" unit uses old, heavy cylinders with a permanent manifold and a meter to provide a bulk-tank type of installation.

FOR a number of years the Pyrofax Gas Corp., New York City, was faced with the increasing problem of what to do with its old "R" type, 100-lb. gas cylinders as they were being replaced by lighter, less expensive, newer models. The problem was particularly acute for the corporation because of its early entry into the liquefied petroleum gas business. The problem was thrown into the laps of the Pyrofax Gas Corp. Engineering & Research Laboratory people in Millwood, N. Y. They came up with a prescription for the "malady" and fittingly enough, it was called an "RX" unit.

As is so often the case, the solution to a difficult problem was surprisingly simple. The lab devised a manifold system to be hooked up to an even-numbered group of "R"

cylinders to give a bulk-like, permanent installation. Several other unique features were added, a patent was applied for, and the "RX" units were made available to "Pyrofax" gas distributors late last year.

One of the most important of the new features, according to John Russell, bulk sales supervisor for Pyrofax, is that the vapor return hose from the bulk truck is used to maintain gas service to the appliances during filling. This allows the cylinders to be filled without interruption or inconvenience for the customer. In other words, while liquid gas is pumped from the bottom of the truck cargo tanks, vapor from the top of the cargo tanks goes through the vapor return hose to the customer's appliances. During this filling period, the cylinders

are cut off from the appliances by an isolation valve. This valve is automatically activated by the removal of the filler valve dust cap and eliminates the possibility of liquid gas being pumped into the regulator through the fault of human error.

The company feels that these new units will enable its 130 bulk distributors in 28 states and Eastern Canada—to "take a giant step toward capturing additional business from a segment of the market that is quite profitable." Russell puts it this way: "A distributor who now has a 200,000-gal. gas load, for example, can, by utilizing 'RX' service, add a new group of customers to his list and expand his gas load to perhaps 250,000 gal. in a very short period of time."

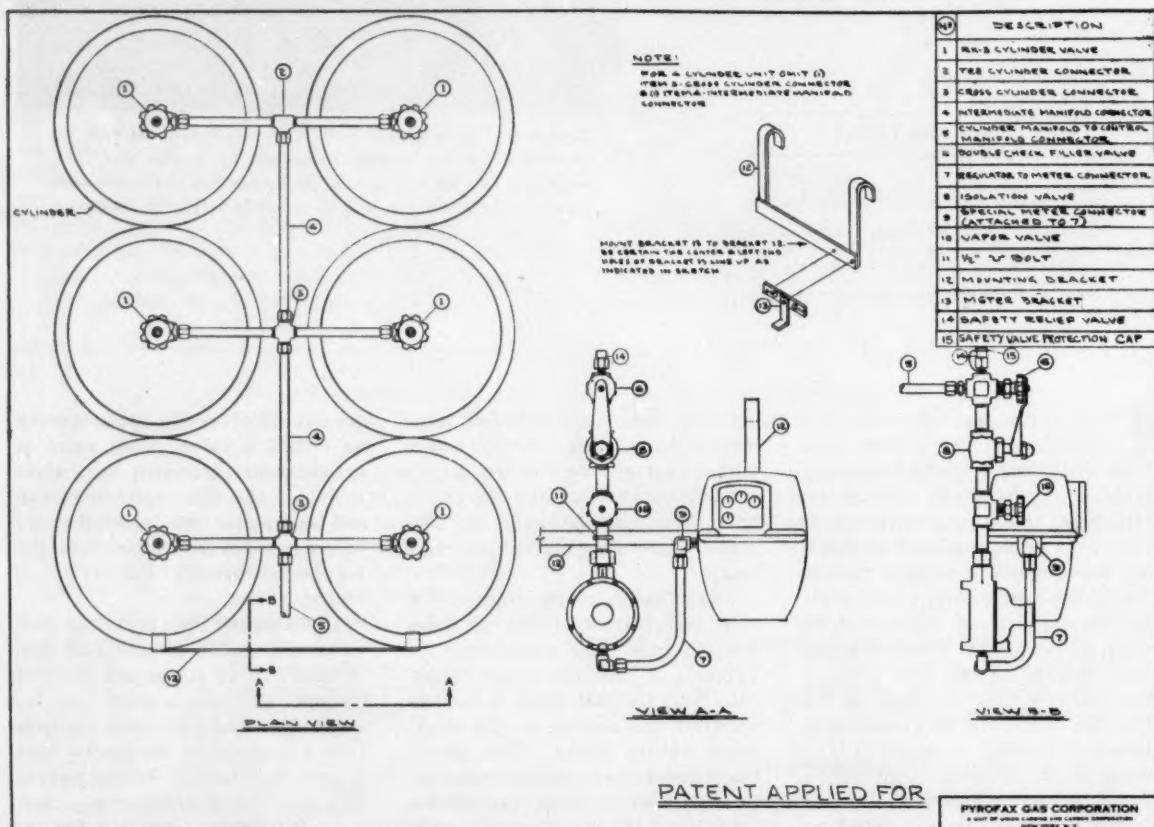
Another advantage of the "RX"



This sequence shows six steps in the installation of an "RX" unit. Here, the workman lays down the wood skid which forms the base.

The skid, which comes in prefabricated sections (each big enough for two cylinders), is assembled and leveled for a permanent installation.

The heavy old cylinders, having been completely refinished, are easily placed on the skid by one man—with the aid of a hand truck.



This working drawing of a six-cylinder RX installation may also be used for a four cylinder unit. It shows the cylinders and manifolding in the top or plan view (left), the brackets for mounting the prefabricated meter and regulator assemblies (center top), and the meter and regulator assemblies as seen from the end (center bottom) and the side (right bottom). For a four-cylinder

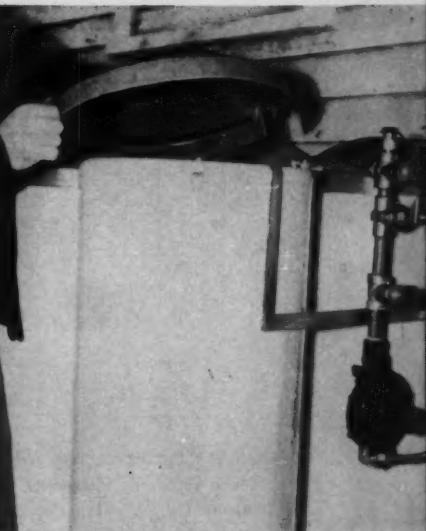
installation, the center pair of cylinders is omitted, along with their cross connector (3) and one of the intermediate cylinder connectors (4). While six cylinders is the present limit, Pyrofax officials believe the RX installation can be developed to use eight or even ten cylinders, practically and economically in the near future.



The installer connects the pre-assembled manifold for this four-cylinder unit, then tightens the connections with a crescent wrench.



A mounting bracket is hung on the upper lips of one pair of cylinders and prefabricated regulator and meter assemblies are hung from it.



Forty-minutes after he began, the workman completes the installation by putting the cylinder covers in place. Note notch in cover for manifold.

unit, in addition to the utilization of the old cylinders and its permanency, is its easy, inexpensive means of installation. "It takes an average of about 40 minutes to put in a four-cylinder unit," Russell says, "and it's just a one man job." He estimates it requires only a 40 per cent new investment as compared with the 100 per cent needed in purchasing new 420 lb cylinders. "The more 100 lb cylinders that are installed in an 'RX' unit," he added, "the smaller the percentage of new investment."

Presently, "RX" units are available to two types of users: the four-cylinder installation for the 300-450 gal. per year customer; and the six-cylinder installation for the 450-700 gal. per year customer. "But," Russell asserts, "there is no limit to the size of these units from a standpoint of practicality, only from a standpoint of feasibility. Once we get above 10 cylinders, it would be better to install a single large tank. There is no reason why these units couldn't be developed up to eight or ten cylinders to take in such applications as chicken brooding, tobacco curing, resort-type business, and other commercial uses."

Russell feels it all boils down to "a modification of the distribution system." Instead of a truck bring-

ing the cylinders back to the filling plant to be filled, a truck takes the gas to the cylinders and fills them on the customer's premises.

"Another saving," Russell adds, "is that the cylinders are already filled when delivered for installation. This eliminates the first filling trip and is possible because the old "R" cylinders are ICC approved and can be transported full. This can't be done with an ASME tank."

The only new equipment needed in an "RX" unit is the manifold system, which is completely fabricated and packaged, ready for immediate use. Everything else is standard equipment — cylinders, domes, meters, bases—except that the cylinders are modified with a special filler valve. The manifold is packaged with its filling valves (liquid and vapor), isolation valve, regulator, and mounting bracket.

The new units incorporate all the features of a standard metered service, such as monthly billing, etc. Some people might feel that the permanency of the unit may lead to a buildup of ethyl-mercaptan. Russell is quick to discount this. "There is less of an odor problem with this unit because the cylinders never become empty so you never have a concentration of odorant. These units are usually filled when they get down to 30 or 40 per cent

of capacity." He also added that the new units meet all the requirements of Pamphlet No. 58.

All of the cylinders in the unit are filled simultaneously and gas is withdrawn in the same manner. The filling rate is about 22 gal. per minute. It's a true vapor space fill and there is no eduction tube. In addition to faster filling, the "RX" system affords greater gas vaporization capacity per cylinder installed. In a four cylinder automatic changeover installation, vaporization can occur in all four cylinders if all contain liquid. When the two "service" cylinders become empty, the possible vaporization rate is then controlled by the remaining two and is only half the rate of a four cylinder "RX" installation.

Pyrofax Gas Corp.'s "RX" program is moving at a fast rate. How long it will take to retire all of the old "R" cylinders is problematical. What happens if and when that point is reached? "It's just a question then of how far down in weights we will want to go," Russell states. "Regardless of how far down we go, though, every 'Pyrofax' gas cylinder can be adapted to this new manifold system." This makes it rather apparent that this is one RX that is really a permanent cure. ■

How to install

Domestic incinerators

A recent "Letter to the Editor" prompted a letter of comment from Locke Stove Co., Kansas City, Mo., manufacturers of — among other things—Warm Morning gas-fired incinerators. At the bottom of the Locke letter was the P.S. suggestion: "Why not run an article on the installation of domestic gas-fired incinerators?"

Why not, indeed? Here is that article, borrowing rather heavily from the thorough instruction booklet Locke furnishes installers.

ASSUMING that the installer has assembled the incinerator itself, according to the manufacturer's directions, the remainder of the installation job can be divided into four separate parts: properly locating the incinerator, venting the unit, connecting the gas, and lighting, adjusting and testing.

Locating the incinerator

The incinerator should be installed as closely as possible to the chimney. The location must be properly ventilated to give sufficient air for combustion. Installation should not be made in a tightly closed room or closet. If there are basements in your area, impress upon the customer that a basement location is preferable to a garage or utility room.

If the incinerator is installed near the open cold air intake of a furnace, a 4 x 8 ft asbestos shield should be placed between the two units. See *Fig. 1*.

Perhaps the most important element in incinerator location is proper clearance to the adjacent

walls, partitions, and ceiling. Minimum clearances vary considerably according to the composition of the building component, its relationship to the incinerator, and the possible use of shielding.

For non-combustible walls, such as concrete, brick, stone, etc., minimum clearance is 4 in.

For combustible walls or partitions, minimum clearance is 12 in. at the sides of the incinerator, 18 in. at the rear. These figures may be reduced to 4 in. provided a metal sheet, 28 gauge or heavier, is installed with non-combustible spacers to keep it away from the wall or partition. See *Fig. 2*. Several other types of protective material may be used instead of the 28 gauge sheet, one of them reducing the needed clearance to 2 in.

Prepared in accordance with The National Board of Fire Underwriters' specifications, *Table 1* lists clearances for 5 different types of protective materials. Figures are given not only for the incinerator itself, but also for the vent pipe

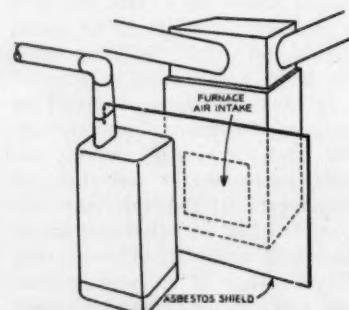


Fig. 1. An asbestos shield should be placed between the two units when the incinerator is installed near the open cold air intake of a furnace.

leading from it, which requires 50 to 100 per cent more clearance.

Clearance to combustible materials or ceiling above the incinerator should be not less than 48 in.

For the vent pipe, minimum clearance to combustible materials

USE OF THE VARIOUS FORMS OF PROTECTION LISTED IN THIS TABLE	REQUIRED CLEARANCES IN INCHES WITH AND WITHOUT PROTECTION *	
	18 INCHES CLEARANCE # REQUIRED WITH NO PROTECTION	12 INCHES CLEARANCE # REQUIRED WITH NO PROTECTION
SMOKE OR VENT PIPE	SIDES AND REAR	
(A) $\frac{1}{8}$ INCH ASBESTOS MILLBOARD SPACED OUT 1 INCH	12	6
(B) 28-GAGE SHEET METAL ON $\frac{1}{8}$ INCH ASBESTOS MILLBOARD	12	6
(C) 28-GAGE SHEET METAL SPACED OUT 1 INCH	9	4
(D) $\frac{1}{8}$ INCH ASBESTOS MILLBOARD ON $\frac{1}{2}$ INCH ROCK-WOOL BATT, REINFORCED WITH WIRE MESH OR EQUIVALENT	6	4
(E) 22-GAGE SHEET METAL ON $\frac{1}{2}$ INCH ROCK-WOOL BATT, REINFORCED WITH MESH OR EQUIVALENT	3	2

*All clearances shall be measured from the outer surface of the appliance or flue to the combustible material disregarding all intervening protection applied to the combustible material. All spacers must be of non-combustible material.

#For example, in regard to the smoke or vent pipe, 18 inches clearance to combustible surfaces is necessary without protection. However, by using as protection (A) above, $\frac{1}{8}$ inch, the clearance or distance of the smoke or vent pipe to a combustible surface can be reduced to 12 inches.

Table 1. Clearances for five different types of protective materials.

or ceiling is 18 in. When that much space is not available, the 18 in. may be reduced to as little as 3 in. with the proper protective materials. *Fig. 3* details a reduction to 9 in. by means of a 28 gauge metal sheet spaced 1 in. from the wall or ceiling.

To avoid unnecessary expense to the customer and considerable work for you, the incinerator should be located so the vent pipe will not have to pass through a combustible wall. If this is im-

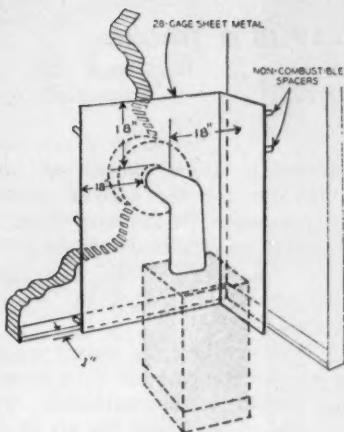


Fig. 2. Here's how a clearance from combustible walls may be reduced to 4 in.

possible, the pipe can safely pass through a combustible wall if you install an insulated or ventilated metal thimble around the pipe. In either case, the thimble must be 12 in. larger in diameter than the pipe. *Fig. 4* shows a thimble filled with 6 in. of noninflammable insulating material resistant to high temperatures. *Fig. 5* details the ventilated thimble installation.

Venting the unit

The gas-fired incinerator must be vented into chimney or flue that is designed to withstand high temperatures. This means vertical masonry or reinforced concrete with a lining of vitreous tile or other approved material. Some localities allow any brick, stone, or reinforced concrete chimney in good condition, with or without a liner. If in doubt, check your local approval bodies.

Do not vent an incinerator into flues made of aluminum, plastic, or soft metals that cannot withstand

the high temperatures generated by newspapers, cardboard, and other highly combustible materials likely to be thrown into an incinerator.

Before running the incinerator vent into a chimney, make a general inspection of the chimney. Make certain that it is properly constructed and that the top of the chimney extends high enough above the roof of the house or building (or of very near structures) to be free of downdrafts.

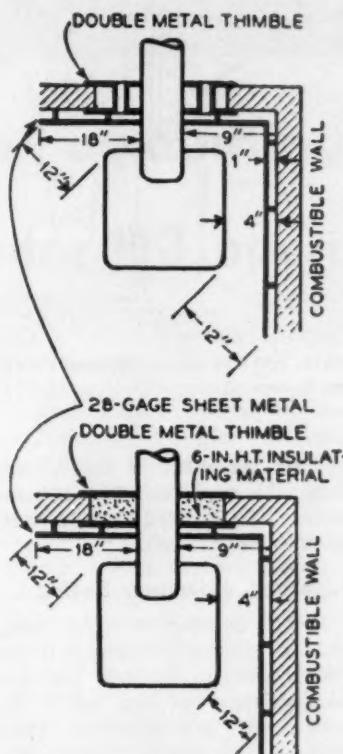


Fig. 4 (bottom) and Fig. 5. Details of two types of thimble installation.

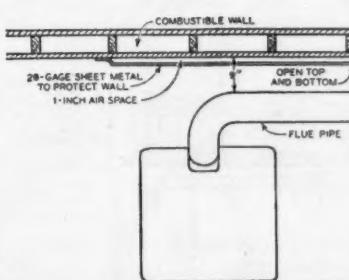


Fig. 3. How minimum clearance from vent pipe to wall may be reduced to 9 in.

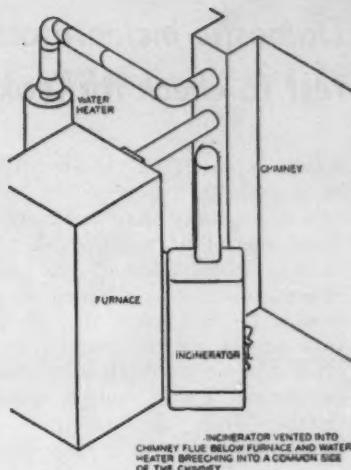


Fig. 6. The vent may be connected into the chimney through its own opening.

or the pipe from another appliance. See *Fig. 8*.

When using separate flue openings for the furnace, incinerator, and other appliances, be sure all openings are at different levels to promote the best possible draft. *Fig. 6* and *7* show different acceptable ways of accomplishing this.

When necessary, two or more appliances may be vented through one chimney opening, provided the size of that opening is sufficient to accommodate the total volume of gases. "Y" fittings should be used for the joints, which must be made as close as practical to the chimney and which must be at as small an angle as possible, not exceeding 45 degrees in any case. See *Fig. 8*.

The process of actually hooking up the incinerator to the chimney begins by connecting the incinerator flue pipe collar to the proper flue with 6 in. galvanized pipe of a thickness not less than No. 24, U. S. gauge, or a pipe having equivalent or superior heat and corrosion resistant properties. The lower lip of the flue pipe should be bolted to the flue pipe collar. All other sections of the pipe should, of course, be secured with metal screws.

The pipe between the incinerator and the chimney should be as short and direct as possible with not more than two 90 deg. elbows. On horizontal runs, the pipe should rise in the direction of flue gas

Domestic incinerators . . . "The installer's final duty is a smoke test to check for leaks. If detected, seal with cement."

travel, at least 1 in. for each foot of length.

A 6 in. heavy duty barometric draft control is required in all incinerator installations. (In this respect, incinerators are completely unique, for barometric draft controls should not be used on any other type of gas appliance.) The barometric draft control keeps chimney draft constant and reduces flue temperatures. It is most often positioned between the first and second sections of flue pipe, but can be at any point 18 in. or more above the top of the incinerator, as shown in *Fig. 9*.

The point where the incinerator

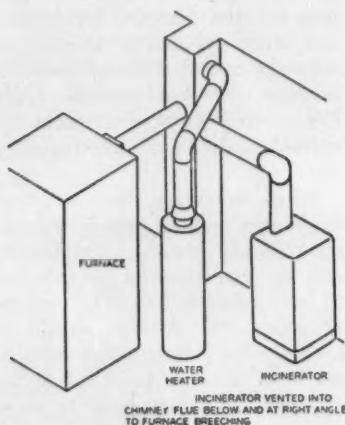


Fig. 7. Alternate method of connecting vent into chimney through own opening.

flue pipe is connected to the chimney should be at least a few inches above the chimney's extreme bottom to avoid possible stoppage due to fly ash accumulation. Also, the flue pipe should not project into the opening far enough to restrict the space between its end and the opposite wall of the chimney.

If the chimney is unlined or if the tile liner does not extend down to the point at which the incinerator vent pipe enters, consult local building authorities.

Connecting the gas

With the flue connected, the only other connection is to the gas

supply. This, of course, should be made in accordance with local building or plumbing requirements or with "American Standard Installation of Gas Piping & Gas Appliances in Buildings." Copies

automatic clock timer, set the indicator for the desired period, which might be anything from 5 minutes up. The timer should automatically turn off the main gas burner at the end of the preset period.

After igniting the main burner, allow the unit to burn for a warm-up period of approximately ten minutes. Then loosen the air shutter, remove the ash pan, and observe the flame. Turn the air shutter until a soft blue flame with a yellow tip is obtained.

If the flame lifts off or blows, primary air injection is too great and the air shutter should be partially closed until this condition is corrected. If the flame is bright yellow, the burner is getting insufficient primary air and the air shutter should be opened enough to correct this. After the final adjustment is reached, the air shutter should be tightened in position.

The installer's final duty is a smoke test. Burn a load of paper to check for leaks. If any are detected, seal them with furnace cement, from the inside, if possible. ■

Fig. 8. Vent may also be connected through the furnace pipe.

of this pamphlet, "Z 21.30," are obtainable from the AGA Laboratories, 1032 E. 62nd St., Cleveland 3, Ohio, at 25 cents.

Lighting, adjusting, testing

Before lighting the pilot, make sure the manual gas valve is in the "Off" position. If any gas has escaped into the unit, or if the pilot light has gone out after burning previously, wait five minutes before starting to light. Then turn the pilot valve to "On" position. Insert a lighted match through the opening provided until its flaming tip is in contact with the pilot burner. Depress the plunger on the safety valve, lighting the pilot, and hold the plunger in for at least 45 seconds before releasing. The pilot light should continue to burn. If it does not, repeat the procedure, holding the plunger in longer.

Then, in models with manual gas control, you simply turn the control to "On," having made certain the pilot light is still burning.

Where the incinerator has an

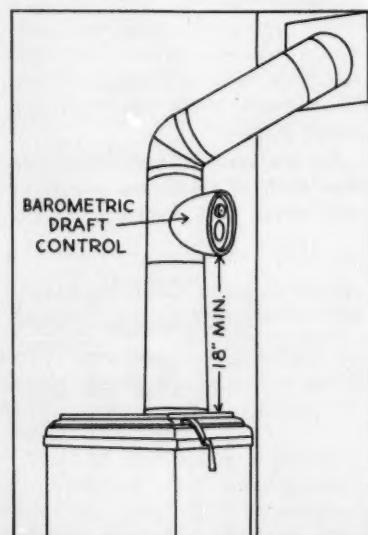


Fig. 9. Barometric draft control can be at any point 18 in. above the top.

I. Typical of Petrolane's highly automated, centralized accounting organization is the sorter, here operated by Fred Strube. Sorted and re-sorted into dozens of combinations, punched cards write checks, render bills, and provide management with vital reports for running a sound, efficient business.



Automated accounting simplifies bookkeeping for 113 operating districts

WILLIAM W. CLARK • Editor

FIRST centralization, then automation—

This has been the pattern of accounting procedures followed by Petrolane Gas Service Inc. during a period of extremely rapid growth. Over the past half-dozen years, the Long Beach (Calif.) firm has extended its operating territories throughout 11 western states—including the 49th state, Alaska. Today it has 113 different operating districts. As this process continued, it posed new problems for the accounting department.

Consolidation, for one thing, should mean increased operating efficiency. This, in turn, implies tighter control. To achieve it, Petrolane executives felt that standardization and centralization of accounting functions were necessary.

With standardization and centralization must come improved accounting procedures. To Petrolane, this has meant increased automation.

Today, practically every accounting job is handled with punched cards. Accounts receivable is the one major exception. However, as

this is written, Petrolane is experimenting with a "slave" key punch which will automatically punch cards as a by-product of the machine-posting operation. It is also installing a pilot plan for a billing system that would be completely card operated.

According to Wallace Ginder, Petrolane controller, the process of adopting automation under circumstances of growth and consolidation is one of evolution. You start with a small company, and generally the records it keeps are those it feels it can "get by with." As it grows, management becomes more aware of the usefulness of good records. It also becomes more aware of the need for streamlining its paperwork.

For the most part, companies purchased by Petrolane had already reached this second stage in their thinking. Many of them had one or two bookkeeping machines. However, hardly any two systems used were alike. One company would have one type of business machine, another company would have a different type. Procedures would be different and the machine would be performing different jobs in many cases. So the process of absorption was a slow one. Even today, it is

still continuing, although it has reached a point where virtually all accounting functions for all existing subsidiaries are standardized, centralized, and automated.

If the process has been slow, it has nevertheless been kept as painless as possible. During every changeover, the old system continued in duplication of the new for the first 60 days or so. This gave Ginder's staff time to work out the bugs in the new system before the old was abandoned. It also served to show employees how the new system works and gave them an opportunity to see at first hand its advantages.

In any changeover to new methods, it is necessary that one function be converted at a time. At Petrolane, tank records were the first to be placed on punched cards. Accounts payable check writing and payables distribution were next, followed by the general ledger summary cards. Then came sales records and, finally, tank rental billings.

Procedures used to automate each accounting function are detailed on the following pages. There is also a small peek into the future, which promises even more automation.

Tank records

IN late 1956, Petrolane made its first move to adopt punched card accounting methods by putting its domestic customer tank records on cards, using an IBM service bureau to handle the work. These cards contain a complete description of the tank: number; size; manufacturer; cost; location by company district, state, county, and city; date manufactured; and date acquired. The tank's custody is recorded as to customer's name, account number, lease number, and type of service. This last entry is broken down into eight categories: loans, rentals, rentals with meter, one-payment lease, inactive field, plant storage, inactive yard, and miscellaneous.

This first step gave Petrolane a centralized fixed assets and accountability record. As each new company was acquired, Petrolane

would transfer all tank records to punched cards. Then, using its daily reports from district offices as source documents, tank records could be continuously updated (new customers, discontinuances, etc.) by the production of new cards and the replacement of the old.

As a straight fixed assets—accountability record, this system has been useful in itself. However, potentially, it has far greater usefulness. Petrolane management feels there should be a closer correlation of tank sizes and customer needs. It is obviously uneconomic to have a 500-gal. tank on the premises of a customer whose usage runs no more than 500 gal. per year because tanks tie up capital. At the same time, it is just as uneconomic to have an undersized tank which must be

serviced too frequently. This ties up trucks and runs up labor and accounting costs. Therefore, the goal is a happy medium.

So, tank cards should be useful in determining "put-through" or turnover of gas stored in each customer's tank. This could not be done conveniently until the sales records were put on punched cards. Otherwise, the accounting department would be trying to mesh a machine card operation with a manual one.

Today, the company is finally at the point where such comparisons can be made. At this writing, more pressing problems in conversion of the systems have taken precedence, so the final development of procedures for making "put-through" analyses have had to wait. However, Ginder anticipates they will be developed soon.

2. Tank records, as well as many other records, are transferred to cards by use of key punch machines. This is a job for Martha Marshall (background) and Norma Hale.

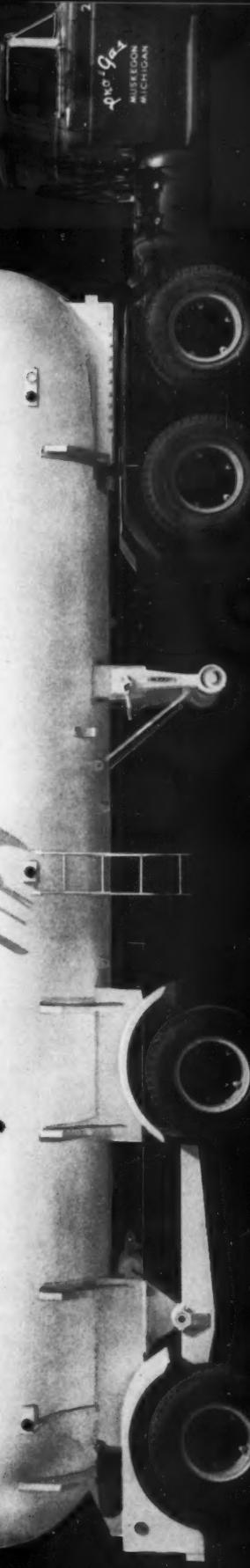


3. A complete fixed assets and accountability record is maintained in this card file, being checked over here by Paul Pawlesh of Petrolane's tabulating department.



Pro-Gas

SALES & SERVICE CO.
MUSKEGON, MICHIGAN



T-1 BEAIRD PAYLINERS

HAUL BONUS GALLONS EVERY TRIP

Beaird's Leadership Engineering and Controlled Quality Construction puts an added bonus in everyday operation through better design and lower maintenance costs.

Every step in Payliner construction from T-1 Steel plate to finished transport is performed at Beaird and under Beaird's rigid inspection procedures. That's why you can't beat Payliner quality, design or dependability . . . at any price.

Check the extra value built into a Beaird T-1 Steel Payliner.

- Manhole in vapor area • ICC lighting with vapor proof wiring in conduit
- Gleaming white automotive enamel finish over sand blasted surface • Gauges on curb side center of tank • Recessed relief valves • Box type sub-frame • Nail Diverters • Additional center bottom openings 3" Liquid 2" Vapor • Choice of landing gear (roll down or stiff leg) • Air lines protected by steel conduit
- Adjustable Rubplate

Write today for Bulletin #2805

You get a big Payload Bonus when you spot a Beaird Payliner under the loading rack. They load up to 500 extra gallons—legally—compared to lower tensile strength steel LP-Gas transports.

THE J. B. BEAIRD COMPANY, INC.

A Subsidiary of American Machine & Foundry Company
Shreveport, Louisiana • Clinton, Iowa • Stockton, California



LP GAS & NH-3 EQUIPMENT

Two Ways to Look at Beaird Storage

1

FROM THE DEALER'S ANGLE . . .
 Complete Plant Packaging.
 Design Flexibility to fit
 every Operation.
 Easy Installation.
 Fast control center operation.
 3 to 5 yr. Financing.
 Engineering & Installation
 assistance.

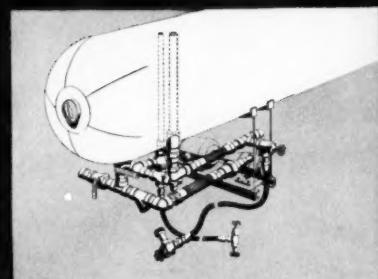
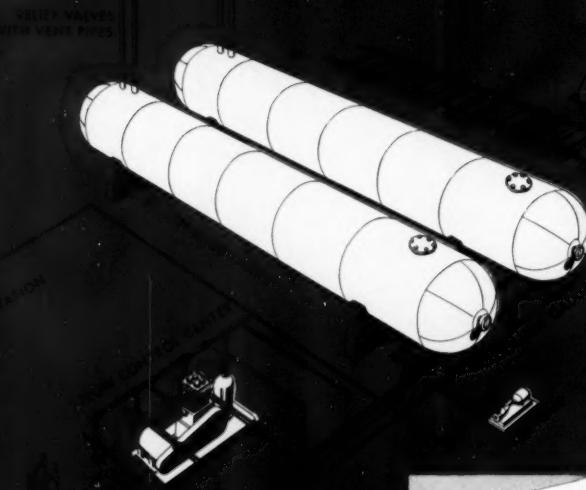
2

FROM THE PRODUCER'S OR MARKETER'S ANGLE . . .
 Fabrication to Buyer's Specs.
 Dependable supply of Steel plate.
 2,000,000 gals. of Experience.
 Built to meet or exceed all code
 requirements.
 Nationwide sales & Engineering
 assistance in Market
 development.

LP-Gas

IMMEDIATE DELIVERY

General layout of a Beaird Packaged LP-Gas Storage Plant



Write now for all the facts on Beaird Storage Tanks and completely packaged LP-Gas Plants . . . designed to meet your particular needs.

NEW INTEGRAL STORAGE PLANT

A complete Economy Package Plant that will unload from transport into storage, load delivery trucks, fill cylinders and may be adapted to fill motor fuel tanks.



THE J. B. BEAIRD COMPANY, INC.

A Subsidiary of American Machine & Foundry Company
 Shreveport, Louisiana Clinton, Iowa Stockton, California



4. Preparing of bills for machine processing is handled by the accounts payable group, two of the three members of which are shown here, Louis Duarte (foreground) and Duane Herrell. Very precise procedural rules have been laid down to guide these men in their work and prevent errors that might show up in incorrect payment of bills.

5. Summary runs for many reports are produced on the 402 accounting machine. Here Ken Meidinger checks accounts payable summary runs before they are transmitted to the controller for approval.



Accounts payable checks and payables distribution

THE processing of records, performed by the IBM Service Bureau, was only an intermediate step in the sequence of automating Petrolane's accounting systems. For true automation on a day-to-day basis, the company had to have its own equipment on the premises so payables liability and distribution cards could be punched and proven as a part of the daily work flow. So, before payables were adapted to punch card methods, Petrolane installed a complete "402 setup." This consists of an IBM 402 accounting machine; two key punches, IBM type 024 with self checking number; a verifier, IBM type 056; a collator, IBM type 077; a sorter, IBM type 082; an interpreter, IBM type 552; and a reproducing punch, IBM type 514.

The manual work of preparing vendor invoices for machine processing is handled by an accounts payable group. This is a three-man team which assembles vendor invoices, makes an accounting distribution of them, assigns to each a vendor number, and groups them into control batches. At this point, the batch is forwarded to the tabulating department, where it is punched and coded for due date.

A summary run or "balance list" is then made on the IBM accounting machine and passed along, with all supporting invoices, to either Ginder or Petrolane's Treasurer, R. L. Bache, for sight auditing. Next, the invoices go to the purchasing department, which audits and approves them.

After auditing, the documents go into the proper files and the balance list is returned to the tabulating department, either approved or corrected. In the latter case, one or more new cards must be punched for corrected items.

Accounts payable checks are written once each week. On the day prior to payment, cards are pulled from the due date file (into which they had been sorted following the running of the balance list) and a cash requirements report is run off. This is a detail list of amounts due by individual invoice by vendor. It is forwarded to Ginder (without supporting documents this time) for final approval. Checks and remittance advice are then simultaneously prepared on the 402 accounting machine. No checks may leave the building until the cash requirements list is approved by either Ginder or Bache.

When the change was first made to punch card accounting methods, check signing suddenly became a peak-load problem. Previously checks had been prepared on a bookkeeping machine. Some of them were written each day, so check signing was a small part of the daily routine. Then with IBM, they were all prepared in a single day once each week, as many as 400 in a single run. Ginder spent up to 12 hours per week auditing and signing checks and other executives were spending a similar amount of time. Everything else had to wait, if all the checks were to get out on time.

So, the next step was a check-writing machine. It reproduces signatures at a rate of 1500 checks or more per hour, thus saving valuable executive time and relieving a peak-load burden.

No control over the check-writing function was lost. Rather, control procedures were simply spread out over the working week and responsibilities were divided. If anything, controls were tightened by these changes, Ginder feels.

The accounts payable clerks must follow carefully drawn procedures in processing bills. They may only



6. Accounts payable summary runs and cash requirements reports are carefully audited by Controller Wallace Ginder (or the company treasurer), as well as by the purchasing department, before any payables checks can be written and released.

process a bill for key punching after it has met certain prescribed conditions. Detailed payables lists are audited twice by the controller and once by the purchasing department. By working from these detail lists, and using self-checking, machine-checked vendor numbers, it is extremely difficult to pay a bill twice. Distribution errors quickly come to light in the easily audited balance lists. The check register also has a numeric control.

Bank account reconciliations are also made quickly and accurately. When a statement is received from the bank, a deck of IBM cards for the enclosed cancelled checks is prepared, with only the check number punched in. The cards representing the cancelled checks are then sorted into check number sequence. Using the collator, they are then match-selected against a deck of cards, representing all outstanding checks and containing check number, check amount, and other reference information. Cards in the outstanding check file which do not match-select then represent the new outstanding bank balance. They are run through the accounting machine to balance to the new bank balance. The match-selected cards which represent current cancelled checks are run through the accounting machine to balance withdrawals and to permit cross-footing of old balance, deposits, withdrawals, and new balance.

The collator match selects at the rate of 480 cards a minute, so a month's batch of several thousand checks can be processed in a few minutes time.

The way the accounts payable system operates is an object lesson in what punched card accounting can do for a business firm. It almost forces increased efficiency, for when employees are working with high-speed machines they themselves must work efficiently. It necessitates systematizing, for without a good system the procedures would fall apart. It places a greater responsibility upon each employee, and it makes possible upgrading of personnel all along the line. It releases skilled accounting personnel from purely manual operations, permitting them to spend more time being accountants, less time being clerks.

As with all systems, there had to be flexibility in the check-writing system. A certain number of checks must still be written manually for on-the-spot payment—for freight bills, tax bills, etc. These are held to a minimum. With them, register is maintained, and the same rigid audit and control procedures are also maintained. To keep payables completely mechanized, cards are created for manually written checks, and, except for the step of check writing, they follow the normal payables procedure.

General ledger

HAVING summary records prepared as a preliminary part of the entry work has enabled Petrolane to post to its general ledger with a minimum of time and manpower. Three men were required to spend a total of approximately 360 hours per month in hand-posting and preparation of a trial balance. Today, one girl can do the same job in 80 hours, releasing these men for higher-grade, higher-paying accounting chores.

The changeover from hand-posting was accomplished last summer after Petrolane acquired the sizeable Calor chain. Until then, 44 ledgers had been used for the 44 corporations which make up the Petrolane group. Now, 113 ledgers are maintained—one for each district—and all are posted on a Burroughs posting machine.

The principal factor contributing to the speed-up, however, was the availability of summary reports from the IBM tabulating department. Posting no longer need be done from a variety of documents, but can be taken directly off the summarized reports prepared by the IBM machines. Also, account breakdowns can be finer than heretofore.

These summaries, in effect, are by-products of the other accounting procedures, and are one of the "extras" that machine accounting provides. Once a system is well established, other by-products can also be obtained from it.

For example, at the moment, Ginder is developing an accounting of "controllable expenses" by districts, together with a consolidated run of controlled expenses for Petrolane and its subsidiaries. These runs will be produced monthly, and will be used to forecast expenses in relation to sales. This gives the company and each component a "working operating statement" far in advance of the regular statement.

Using these working statements, efforts can be made to reduce those expenses over which each individual branch manager has control—strictly local items which are not within the scope of top management policy-making.

Sales records and accounts receivable

ALTHOUGH accounts receivable are posted on bookkeeping machines, sales data is key punched into IBM cards. Using tabulating equipment, Petrolane is able to obtain excellent sales summaries. These can be correlated with tank records to establish a "put through" factor as mentioned previously. Other by-products are summaries which are useful to management in controlling each district's work.

Processing of information from the field starts with the receipt of packets from each district. Most districts report daily, although some of the smaller are on a weekly schedule. Inside are individual drivers' reports, cash reconciliations, and records of local payments out of petty cash. After the mail has been sorted, the sales envelopes are forwarded to the sales analysis clerks who process the contents, balancing the cash, making entries on the cash record, and sorting the charge tickets to an alphabetic sequence.

The envelopes are then grouped by district in batches and an identifying, dated "run" tag is prepared to accompany each batch, which is forwarded to the control desk. Here it is logged in, and logged out to the tabulating department. There the key punch operators punch a card for each sale, recording tank number, invoice number, state code, tax class, month, corporation, district account

number, total gallons, and dollars. Tabulating next produces a balance list of all sales in the respective run, coming up with an automatic total of sales dollars (by batch by district) which must balance with the total of subsequent postings to accounts receivable. The run is then returned to the control desk (with a copy of the balance list) where it is recorded and transmitted to accounts receivable.

Customer ledgers, which are retained in trays segregated by district, are posted as to both dollars and gallons sold. Then the totals on the run tags are checked against the accounts receivable totals, which is the first proof of the posting. The predetermined dollar total was an operation that once had to be done by hand on an adding machine. Now a quick sight comparison suffices, thanks to the automatic total received from IBM.

Following the balance check, the runs are returned to the control desk, where the dates on which the runs were handled are noted and the gallons and dollars verified.

With this system, at month's end or soon after (depending upon how quickly the mail from the most distant districts arrives) management can immediately have a reporting of the month's gallon sales. This up-to-date report helps in making reasonable estimates of current profits.

Having punched cards for every invoice makes it possible to obtain a sales summary, which is useful for tax reporting purposes. Each card is coded according to tax classification, so a simple process of machine sorting (at 650 cards per minute) and tabulating (at 150 cards per minute) quickly obtains the desired breakdowns for tax distribution.

An additional sales summary, expressed in dollars, is run for the use of management. It is subdivided by subsidiary corporation and district.

A highly useful market report, the "Branch Monthly Recap," is also obtained from these cards, merged with a deck of cards for the corresponding month of the previous year. This compares gallonage sold and dollar value of appliance sales, tank rentals, and service income for the two months. It gives a comparison of average prices per gallon of fuel sold in certain types of classifications for the current month as against the same month of the previous year. It also shows the average price of total gallons sold.

This report, in effect, sets up a profit and loss statement for each district, omitting the dollar sales of gas. When combined with the expense distribution, it provides a good management tool at the district level.

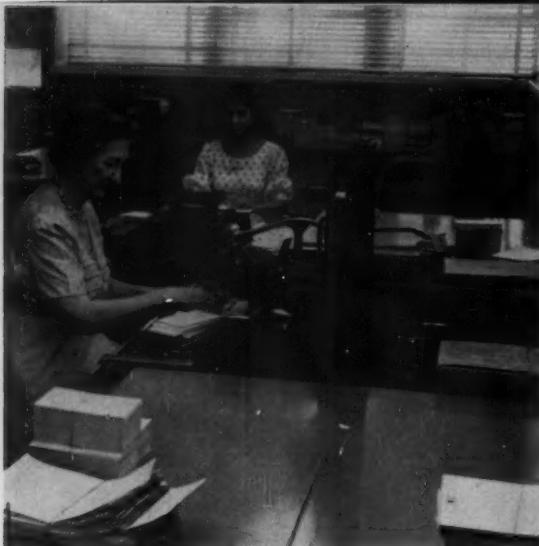
An additional by-product of the sales summary cards is the individual analysis of each driver's performance. From the daily driver's reports the tabulating department punches summary cards showing the number of gallons deliv-

7. Controller Ginde⁷ stands in the accounts receivable department's ledger room, where all customer ledgers for all 113 districts are maintained.



8. All posting of customer ledgers is done on bookkeeping machines (here operated by Arva Turner, with Barbara Walters in the background).





9. Mailing of statements is done from addressograph plates, being prepared here by Hazel Munro (foreground) and Cecilia Segraves. Envelope stuffing is automatic.



10. All incoming and outgoing mail between main office and districts is processed at a central mail desk. Here Kenneth Moore operates the postage machine.

ered, miles driven, and number of stops made. This information is merged with sales data to obtain a report that is particularly useful to marketing management in reviewing operation. Fuel reconciliations can also be made by matching sales cards and driver's reports.

More than 30,000 customer statements must be rendered each month. This job is handled from

the central office in Long Beach on a district-by-district cycle billing schedule.

The entire procedure has been automated to practical limits. Stuffing is done automatically by machine and postage is affixed by meter.

Credit follow-ups are the responsibility of the individual districts, so copies of the statements are sent the same day to the districts where

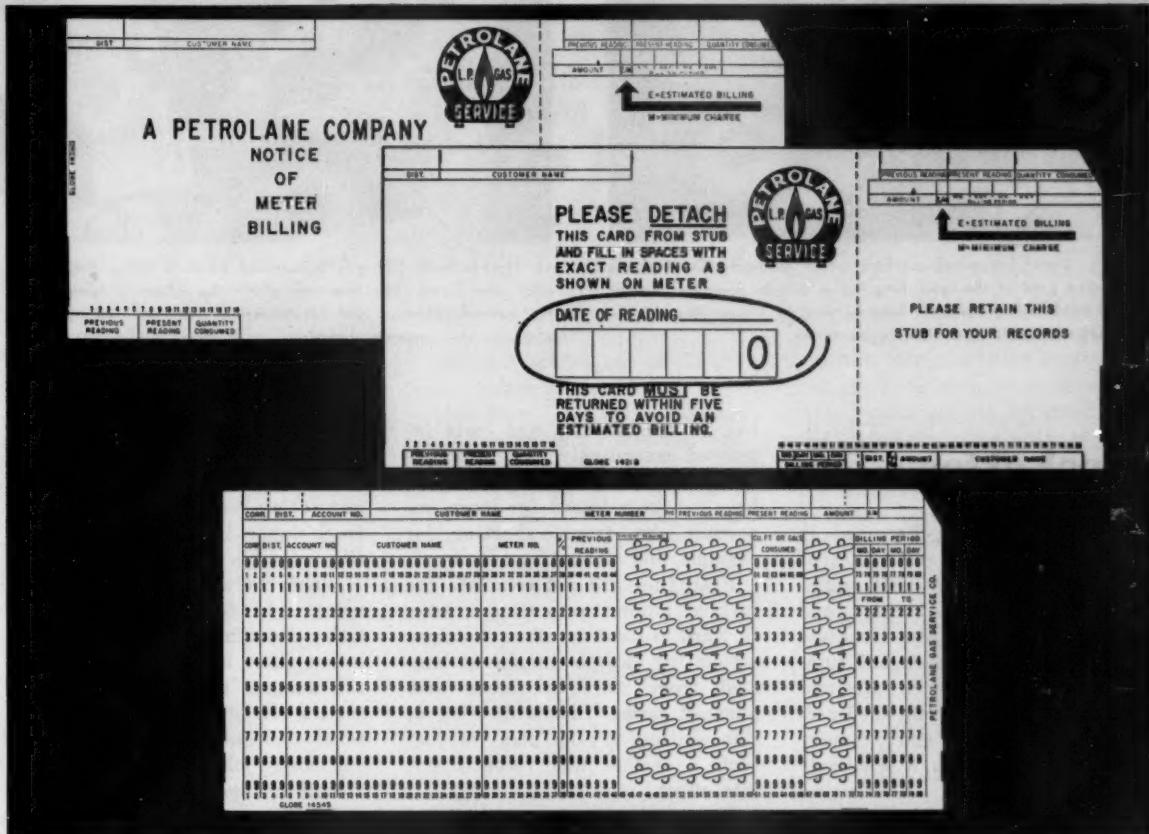
the accounts are located. By filing these statements by customer, the local district has a complete ledger on each customer. Each month an aged analysis is prepared on the bookkeeping machines and a copy is distributed to the credit department, to the district, and to each driver. It's up to local personnel to pursue collection of accounts, under direction of the centralized credit department.

PETROLANE BRANCH MONTHLY RECAP										O	
XYZ DIVISION JUNE 1959	GALLONS		GALLONS		AVERAGE PRICE		DOLLARS			O	
	19	57	19	57	CR	19	57	CR	19	57	CR
DOMESTIC	84381	86907	2048	2063			31123				O
HIGHWAY	245	885	1388	2800			34				O
COMMERCIAL	834	400	1880	1950			44				O
METER	6056	7404	2024	1997			1241				O
OTHER	1944	10010	1652	1623			322				O
RET SALE EX TAX	927	9303	2740	CR 2346			808	CR			O
	61883	6050	2029	2000			12556				O
		84376					1643		8562		O
APPLIANCES							776		1335		O
FITTINGS											O
TANKS									355		O
CARBURETION							CR	524	537		O
LABOR SERVICE								156			O
TANK RENT							3098	4789			O
											O

One of the useful byproducts of Petrolane's automated bookkeeping system is the "Branch Monthly Recap" produced by its IBM accounting machine. It compares a branch division's gallon-

age sold and its dollar value of appliance sales, tank rentals, and service income for a recent month with figures for the corresponding month of the previous year.

Metered accounts



Just as do the big utilities, Petrolane bills its customers via IBM cards. Different types are used for customers with dealer-read meters (top) and customers who read their own meters (center). In the latter case, they mark the figure in the circled box and return

that portion of the card with their remittance, providing information for a new billing. This information is transferred with mark-sense pencil to an IBM punch card (bottom), one of which is prepared each month for each metered customer.

A SUBSTANTIAL proportion of Petrolane's accounts are on metered service, so accounting for these customers is handled in a different manner, using punched cards.

The key to this system is a punched card which is a combination invoice and meter reading record, stubbed like a utility bill. The card, when it is mailed to a customer, contains in both print and punched code his name, district, billing period, old and new readings, and amount of bill. When the customer receives it, he makes a new reading of his meter, detaches the stub for his own records, and returns the card with his payment for the previous month.

The reading and the date read are transferred to a second card at

the company's meter desk by mark-sensing. This is done with a special mark-sense pencil which the IBM reproducing punch machine "reads" and converts into appropriate punches. At the same time, all identifying information is reproduced into the new card, together with the old reading. The cards are then sorted and a run is made on the 402 accounting machine of all meter customers in a district. This run is returned to the meter desk, where pricing is done from district price books, and the charge noted on the meter summary run. A copy of this meter summary run is forwarded to accounts receivable for posting, then returned to the tabulating department where the amount is punched into the customer card.

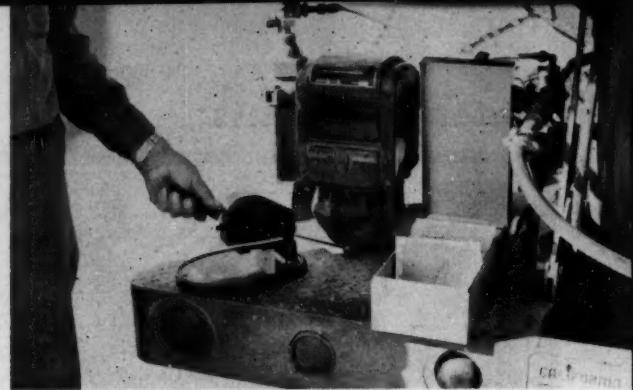
The tabulating department is now ready to complete the cycle, reproducing a new combination invoice and meter reading card. Return postage is automatically affixed to the new card, it is collated with the statement prepared by accounts receivable, and the two are mailed to the customer for a new reading and a new billing.

Where meters are read by the company, cards are prepared directly from the meter reader's records, by-passing the mark sensing operation. Billing is still done by a stubbed punched card.

Regardless of whether the company or the customer reads the meter, each district manager receives a copy of the meter summary run on all of his customers after every billing period.



11. This "slave" key punch machine, which automatically produces a punched card at the same time Evelyn Atticks posts an account on the bookkeeping machine, may be used to bypass steps in the accounts receivable operations in the future.



12. Start-to-finish billing with punched cards is being tried on a pilot plan basis. The imprinter which the driver is using prints the customer's name and identification from an addressograph plate on the customer's card.

A look at tomorrow

THE jobs we have discussed do not comprise the entire list of operations handled by IBM equipment. Tank rental billings and lease agreements are also processed by punched card methods, and summary reports of customer gains and losses are produced from card records, as well as detail and summary gallonage controls on a wholesale distribution level.

At this writing, procedures are being worked out for putting payroll and personnel records on cards. A big saving will result from mechanized preparation of 941 Social Security and W-2 tax forms and other personnel reports.

Until now, these reports had to be prepared manually, and this has been a peak-load job. Extra help

had to be called in, and costs increased accordingly. By automating these operations, additional help will be released for more important jobs—trouble shooting, for example, and accounting-type work.

Even this will not complete the task of automation. Ginder looks forward to the time when customer accounting can be completely handled from start to finish with punched cards. In one district, at this writing, a pilot plan for just such a system was recently put into effect.

This system makes use of two identical decks of individual customer cards, to which are affixed credit-card-type addressograph plates. The plates give customer name, address, and identifying number. One set is maintained in the district office in alphabetical order. The duplicate set is given to the route man. As he makes a

delivery, he records the sale on a card-type invoice, pre-punched as to district and invoice number. An imprinting machine installed on his truck duplicates the customer identity into this invoice.

When the sale is made, the invoice card is forwarded to the tabulating department where the billing information is punched in. With the number identification system, sorting of bills alphabetically becomes unnecessary, so another tedious, costly job is eliminated.

Such changes as this, of course, must dovetail into Petrolane's expansion plans, just as in the past. This makes system transitions more difficult than they would otherwise be. If the company is to continue to expand, ever-increasing automation will be a necessity; so it appears that the process of continued mechanization will go on for a long, long time. ■

L. G. Corliss		ALPHA CARD	
3300 Paseo Del Mar			
Palos Verdes East, Calif.			
Name _____		Route _____	
Mailing Address _____		Rate _____	
Phone _____		Term _____	
Specie _____		EVERY OWNER'S NAME & ADDRESS	
OWNER NAME _____			
7011-0155 01-02-23801			
L G CORLISS			
3300 PASEO DEL MAR			
PALOS VERDES ESTATES			
CALIFORNIA			
NAME OF USER		ADDRESS OF USER	
		IRB. NO.	MAIL
Service	Hour (BY U.)	Wet, Heat	Conc.
			Bed.
			Engines
			Other
DIRECTIONS (Draw Map)			
			

Material used in Petrolane's completely automated experimental system include the Alpha card (left) and the triplicate copy.

original invoice punch card (right). The invoice card is imprinted with the machine shown in use, (above, right).

After eight years—

free radio commercials are still this LPG dealer's best advertising

C. C. SPRINGFIELD

IN broadcasting, an eight-year-old program is a phenomenon; an eight-year-old program that retains its original sponsor, is virtually unheard of. Yet, such a program is heard daily in Eastern Texas, aired by an LPG dealer who believes it to be the best advertising medium he could use.

The dealer, S. R. Westbrook of Consumers' Fuel & Appliance Co., Crockett, Tex., has conclusively proved that his public service program, "Trading Post of the Air" publicly personifies his "service" motto.

Every month since 1951, Westbrook has tossed \$120 into the Texas air. He believes such a long term expenditure to be well justified—in terms of public good will, an ever-growing customer list, strengthened ties with old customers, and rapid turnover of appliances.

Certainly such a program could prove equally beneficial to other dealers in all parts of the country, for it strongly accents the good

service aspect that LPG dealers want to play up.

"Service" with a capital "S" has been Westbrook's motto ever since he took over the firm 12 years ago. He had come from a Wichita, Kan., soft drink firm and his new company consisted of one bobtail truck with a 720-gal. tank, one old pickup truck, and 245 customers.

He followed his "service" motto explicitly. When a customer was out of gas, be it day or night, weekday or Sunday, a Consumers' Fuel truck was dispatched.

It seemed only natural that something like the "Trading Post of the Air" should grow out of such a policy.

When radio station KIVY went on the air, it was, like most small stations, an independent forced to scratch for programs. All available local talent was pressed into service with the inevitable result that Crockett residents began to listen to their friends and neighbors instead of the older stations in the larger surrounding towns.

Noting this interest, Westbrook knew he'd found his advertising medium. He had little trouble deciding what sort of program he would sponsor, for he fondly remembered a trading-post-type program he'd heard in Wichita. Using it as a guide, he had his own show whipped into shape within a few days.

Its format was simple, very much the same as it is today. It opens with the homely but appropriate theme, "Home on the Range," which fades down under the opening commercial:

"The Consumers' Fuel & Appliance Co. presents the Trading Post of the Air every day at 12:15. If you have anything to buy, sell, or trade, Consumers Fuel & Appliance Co. will broadcast it for you free of charge. Stop in at Consumers' Fuel & Appliance Co. and give them your ad. Please do not phone. Take your ad to the Consumer's Fuel & Appliance Co. on the Houston Highway, or give it to one of their drivers and they

S. R. Westbrook of Consumer's Fuel & Appliance, Crockett, Tex., culls customer's commercials before giving them a free airing.

Here discussing copy with the announcer, Westbrook finds his program requires very little work, but provides good results.



"TRADING POST OF THE AIR" KIVY



After the free ads are broadcast twice, they are placed on a 4 x 12 ft bulletin board in the Consumers' Fuel & Appliance office, where they remain for seven to ten days, increasing office traffic considerably.

will put your ad on the Trading Post of the Air, two days in succession, free of charge, and with no obligation to you."

Several free ads follow. A record provides change of pace. A spot announcement sell a Consumers' Fuel & Appliance product. More music and free ads and the closing commercial and theme wind up the show.

This simple format has made the Trading Post KIVY's most popular program, according to the station's owners. It is not just the something-for-nothing angle that causes such popularity. The great variety of the free ads gives the program a folksy sort of newness. While the general classifications of a newspaper's classified section are followed, the ads take on a genuine local flavor. A lost and found ad, may be for a lost cow; a help wanted ad, for cemetery workers; a miscellaneous-for-sale ad, for a chain saw. The commercials are read as the individual writes them, often giving the program a folksy sort of humor.

Results achieved by the free commercials attest to the genuine worth of the program. Often, a number of items that had been for sale for months will completely disappear within hours after a broadcast.

Westbrook learned in a hurry to handle the program in such a way that it would mean a minimum of work for him. He began by accepting phone ads, but found this tied up one girl almost completely, so he quickly discontinued this practice. Since then, there

has been little change in the set-up.

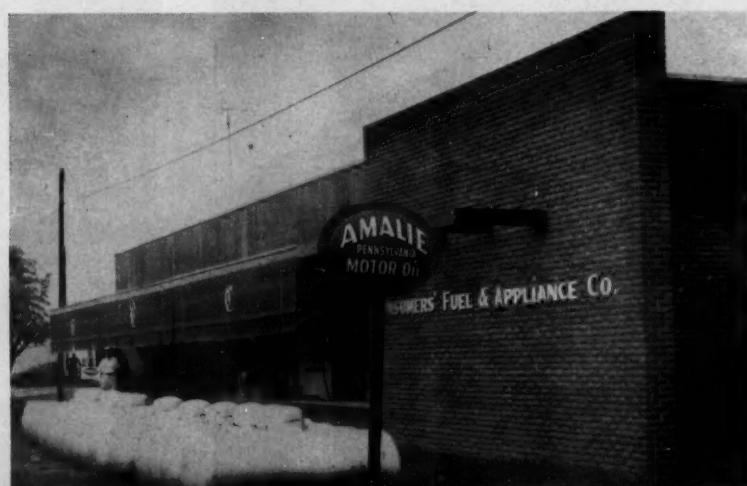
All persons, other than customers, wanting ads put on the air must bring them into the firm's office. His own customers can mail them in. By placing this restriction on his service, he greatly cuts down the amount of work going into the program and he brings potential customers into his place of business. Currently, about six ads per day are brought in.

Westbrook quietly wastebaskets ads from commercial firms, but if one of his LPG customers opens a business, he gives him a week's free advertising. He also allows his customers to advertise used ranges, refrigerators, etc., although he sells the same items.

Customers of other LPG dealers are welcome to use the program and Westbrook has noticed many of them quietly becoming his customers.

If someone hears a commercial

From one bobtail and one pickup to this very attractive headquarters is the 12-year-old success story of Consumers' Fuel & Appliance—and much of it was made possible by the "Trading Post of the Air."



but fails to get all the information, he can get it by going to the Consumers' Fuel & Appliance Office, where all ads are posted on a large bulletin board for seven to ten days after broadcast.

Thus, the program involves little work for Westbrook. No clerks are needed to handle the ads. No copy writers or agencies are needed to prepare copy for the program. All Westbrook has to do is skim through them, pick out a few records and work up a spot announcement or two for his own commercials.

How effective has the program proved for Consumers' Fuel & Appliance? Although the firm does some newspaper advertising, it relies on the Trading Post to get its message to the public. How well that message has been communicated may be judged from the fact that the one-man business serving 245 employees is now a 14-employee concern with over 3000 customers.

Even better evidence of the program's effectiveness is the way it moves trade-ins. While used appliances present a problem for most dealers, Westbrook has sold as many as three during the afternoon following a commercial.

With such results, it is little wonder that Westbrook regards the \$120 monthly program expense as money well spent. The "Trading Post of the Air" and "Consumers' Fuel & Appliance" have become household words in the 50 mile area surrounding Crockett, an enviable position for any LPG dealer! ■

LEAVE YOUR CUSTOMERS



Recently a leading LPG distributor undertook to find out what its customers thought of the service it is rendering. A survey which it sent out brought replies which ranged from complimentary to unprintable. Analysis of those in the latter category brought out one glaring weakness: failure of contact personnel to "communicate" satisfactorily with the customer.

Simply putting an appliance into good condition is only a part of the serviceman's job. A workmanlike job, done without tact, may still leave the customer disgruntled.

Here are some tips on how to improve customer relations, with a short quiz by which your servicemen can test their ability to handle typical service situations.

Seven simple steps to make service pleasant

1. Have a competent individual act as a service call clerk. Often times, a few well-directed questions can eliminate a trip. This is especially true on newly installed products.
2. Be prompt in handling service calls. If an appointment has to be broken, advise the user and set a new time.
3. From the nature of the complaint, attempt to have parts which may be necessary with you. Fast, one-stop service eliminates call backs and reduces cost.
4. Upon arrival, be neat in appearance and orderly in your manner. Be careful not to damage customer property and have the necessary tools to do the job with you.
5. Listen to the user's complaint. This is important for three reasons.

First: It gives the customer an opportunity to

SMILING!

register her grievance directly. It makes her feel important.

Second: The customer complaint will supply clues to the nature of the trouble if it is not obvious.

Third: It gives you a chance to prepare yourself for the job—to justify the need for service. This is often necessary when the product is new.

6. Go to work—make a thorough inspection. Don't just fix the obvious. Be on the lookout for anything which might be in need of attention. Use your test meters and service manuals. Make the problem look important. Always try to give the customer something extra. Such as leveling an appliance or giving some advice on how to obtain better results from the use of the product. This sort of service speaks well for you and your organization.
7. If parts are needed or you do not have sufficient information, assure the user that you will return as quickly as possible to complete the job. When delay is encountered, contact the user so as not to cause her anxiety. Often times this will forestall her writing a complaint letter. After the inspection or repair report your findings to the user. Clean up the product.

Start using this approach with your next service call:

1. Smile—identify yourself.
2. Call the user by name. It makes her feel important.
3. Get the other person to say yes immediately.
4. Be a good listener.
5. To get the best of an argument avoid one.
6. Never tell a user she is wrong. Use the "Yes but" method.
7. Use encouragement. Make the fault seem easy to correct.
8. Dramatize your idea.
9. Make the user happy about doing what you suggest.



Servicing Quiz

1. When selling the customer a replacement control, what point should you stress the most? (Check One)

- (a) That you don't know how long it will last.
- (b) It is unusual for a control to fail.
- (c) The part carries a warranty.

2. At the time of replacement you should: (Check One)

- (a) Try to find a reason for the failure.
- (b) Install the part and leave as rapidly as possible.
- (c) Blame the failure on poor workmanship.

3. If you don't understand the customer's name or you don't know how to pronounce it, you should: (Check One)

- (a) Call her Mrs.
- (b) Ask her to repeat or pronounce it.
- (c) Laugh and say it's unusual.

4. You should always carry your tools and test equipment into the house and use them to: (Check One)

- (a) Make the job look important.
- (b) Make it look like a big job.
- (c) Get her ready for the bill.

5. If the customer hasn't read her instruction manual, you should: (Check One)

- (a) Get mad and insist she does.
- (b) Make her find it and read it with her.
- (c) Suggest she does, but give her some recommendations for getting better use out of the appliance.

6. To make yourself look important you should always: (Check One)

- (a) Criticise the work of the previous serviceman.
- (b) Blame the selling dealer for not demonstrating the appliance.
- (c) Have clean uniform and haircut; use your tools and test equipment.

7. When customer "lets off steam", you must: (Check One)

- (a) Listen—she might clue you to trouble.
- (b) Argue—to maintain reputation of you and product.
- (c) Pay no attention—just continue with what you were about to do.

8. When you can't keep an appointment, it's best if: (Check One)

- (a) You just forget about it. She'll realize you're not coming as it gets later.
- (b) You or the dispatcher call back, apologize and set a new date or time.
- (c) You surprise her by making call first thing tomorrow.

9. When the product line is experiencing difficulty you should always: (Check One)

- (a) Tell the user because it makes them feel important when you take them into your confidence.
- (b) Tell her this isn't anything—you have had many others just as bad or worse.
- (c) Minimize the trouble—making it seem easy to correct.

For answers please turn to page 70.

How to trouble shoot a nuisance call



First: What is the complaint? Ask the user to state exactly what is wrong. A typical example might be: "My refrigerator operates too often."

Second: What are the reasons for this complaint? Is it based on fact or lack of understanding. A few typical reasons are:

- "My old refrigerator didn't run as often"
- "My neighbor tells me that hers—"
- "My friends have one that never seems to run"
- "Time it and see for yourself."

Third: What are possible solutions? The following are examples of good and bad. Which would you select?

1. Tell the user she is all wrong
2. Explain the reason for frequent cycling
3. State how long another user's refrigerator operates and add that they aren't complaining
4. Advise her to write to the factory

Fourth: What is the best solution? Never tell a user she is wrong or imply that she is creating a nuisance. Obviously you should explain the reason for frequent cycling.

Go to work and make a thorough inspection. Back up your statements with test equipment.

Now that the solution has been selected use this approach:

Point: Refrigerators cycle more frequently nowadays.

Reason: To maintain an even cabinet temperature, which, as you know, is more beneficial in the storage of food.

Example: "Your refrigerator, Mrs., operates about minutes on and off. This is in accordance with factory standards and other refrigerators of this type which I have checked." (Have proper test equipment in use and view.)

Summary: "I am sure that you can see how more frequent cycling is beneficial to you and your family, Mrs. The refrigerator uses little gas and maintains an even temperature."

Note that we have not told her she is wrong, nor have we been drawn into an argument. She has been given an explanation which has been backed up by your use of test equipment.

Remember: Back the facts with test equipment



Overcoming opposition to repairs on "in-warranty" products

Typical example: Replacing a unit or component in a new refrigerator.

User: "I don't want a unit replaced in a new refrigerator."

DO NOT SAY: "O. K., Lady, see the boss or write to the factory."

RULE: Use encouragement. Make the fault seem easy to correct.

Serviceman: "It is really not a large or difficult job, Mrs. and we can do it quickly."

User: "I don't see why this should have to be replaced. Why can't I have a new refrigerator?"

DO NOT SAY: "Then we would have a used cabinet."

RULE: To get the best of an argument, avoid one.

Serviceman: "The work will be done in accordance with your warranty and at no expense to you."

User: "But then I'll have a second-hand refrigerator."

DO NOT SAY: "It was second hand when you started using it."

RULE: Make the user happy about doing what you suggest.

Serviceman: "The parts used will be genuine and the work will be done in a careful manner. Your original warranty will still apply."

TERMINATE by saying that you will proceed to make the necessary arrangements. Thank her for her time and leave.

NOTE: We have not said no to any of her requests and have avoided being drawn into an argument. She has been told exactly what we will do.

Overcoming opposition to repairs on a "charge basis"

Example: Replacing cold control shortly after expiration of warranty.

User: "I don't see why I should have to pay. It must have been faulty from the start."

DO NOT SAY: "Well, that's the way it is, Lady."

RULE: Never tell a user they are wrong. Use the "Yes, but" method.



Handling situations and customers

Serviceman: "Yes, but the control has operated innumerable times, Mrs. We are acting in accordance with your warranty."

User: "How do I know the new control won't do the same thing?"

DO NOT SAY: "You don't know; anything is possible."

RULE: Make the user happy about doing what you suggest.

Serviceman: "All genuine replacement parts have a guarantee."

TERMINATE: "I am certain the new control will give satisfactory service and I can make the replacement now."

Note: We have not said she is wrong in her reasoning, nor have we argued the matter with her. ■

Courtesy Norge Sales Corp.



A partial view of the huge Carlton Mill building, located three miles from Cripple Creek, Colo.

Thar's still gold in them thar mills

J. ARTHUR THOMPSON

THE once great Cripple Creek mining district in Colorado isn't dead, but it almost was, and it might be today if it had not been for L. P. gas.

In the early part of the Gay Nineties a young cowpoke named Bob Womack found gold on Cripple Creek. He failed to keep the secret, and the stampede that followed into the Cripple Creek-Victor area has become a classic of Western lore.

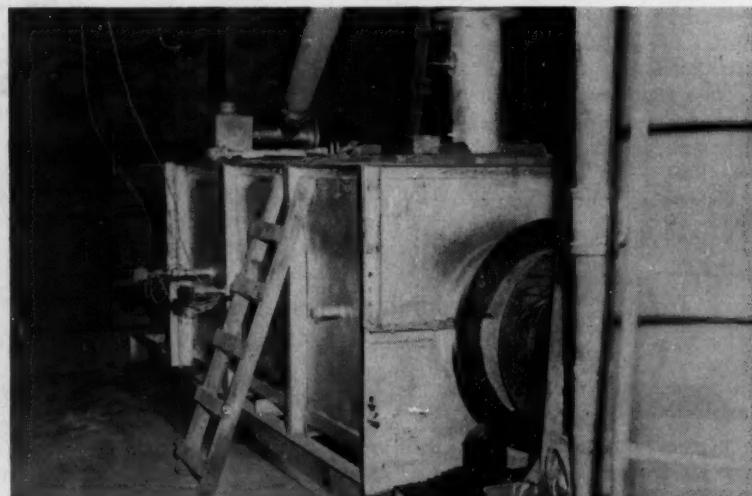
Both Cripple Creek and Victor became cities of first importance in the economics of Colorado. People and money poured in. Gold poured out of the bare, yellow hills to the tune of \$800 million. Fifty-eight trains a day rolled through the Victor station.

Then the veins pinched out and most of the population drifted to other parts where a meal was easier to achieve. Today, the two

towns, just six miles apart, are going concerns but only sad ghosts of their former glory.

One mining firm kept going and is doing very well. The Golden

Cycle Corp. is still producing gold and making a profit out of it. That company's Carlton Mill, midway between Cripple Creek and Victor, is a modern, efficient operation. In-



Temperatures are held at 1000 to 1100 deg. F by L. P. gas in this charcoal reactivator.

elegant looking ore runs through a lengthy procession of stamping and grinding machines and vats, and out comes that yellow stuff that Uncle Sam buys and puts back underground at Fort Knox.

The cyanide process now used in the mill is a far cry from the crude stamp mills and mercury processes of the 90s. Operations are largely automatic, and the uneven, uncertain heat of coal is replaced by modern fuels, particularly L. P. gas.

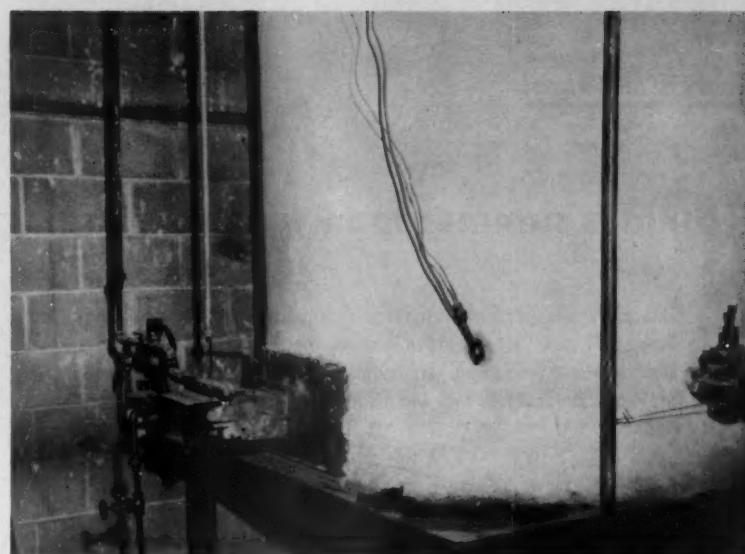
At one point in the complicated milling process, the sludgy ore goes through activated charcoal which has been moistened with a weak cyanide solution. This activated charcoal has an affinity for gold, so picks it out and sneaks it away.

The gold bearing charcoal is then placed in a story-high vat and doused with a very hot, strong, caustic cyanide solution. That's too much for the charcoal and (like anyone else would do) it drops the gold. The gold is recovered from the cyanide by electrolysis.

This caustic cyanide solution is heated in a special vat designed by mill superintendent Buck Keil. At the bottom of the tank, L. P. gas burners force the heated gases through a pair of 3-in. pipes which double back on themselves and finally join near the top of the tank to come out in a 6-in. vent. Temperatures are automatically and rigidly controlled at 193 to 195 deg. F.

In the meantime, the charcoal which lost its gold has become too weak to hold up its head. It's a very special charcoal made from peach and apricot pits and it's very expensive. (It comes from California.) Something has to be done to the black soggy mass to pep it up and give it a new interest in life—to reactivate it, if you want to be technical. That's another job that is done by L. P. gas.

With an assist from superintendent Keil, the Merrill Co. designed the reactivator. The charcoal must be brought to a very high, closely controlled temperature and held there just so long. Electric heat was tried in the early operation of the reactivator, but it failed to give the desired results. L. P. gas was substituted and has proven highly efficient and satisfactory.

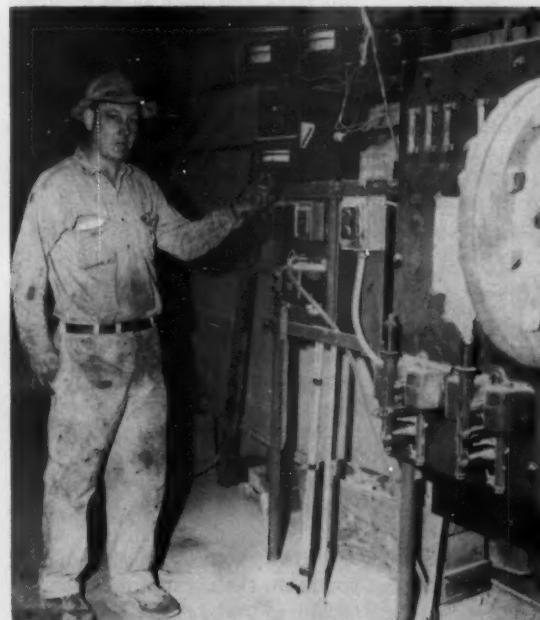


Close-up of L. P. gas burner inlet on cyanide heating vat.

The reactivator looks like an ordinary steel box perhaps 15 ft. long. But that is just the outer shell. Inside there is a refractory lining. Then there is a rotating, stainless steel cylinder, 12 ft. long and 20 in. in diameter. Thermocouples are located about midway of the cylinder to hold the L. P. gas-fired burners at 1000 to 1100 deg. F. There is a spiral fin inside the tube which catches the weak wet charcoal as it comes in at one

end and gradually moves it through the tube as it rotates and discharges it at the other end after just the proper length of time. The charcoal is now hot and peppy and ready to go looking for more gold.

Gas is supplied for these two operations by two 1200-gal. tanks located outside of the long, slanting, hillside building. Usage is from 1500 to 1700 gal. per month. The fuel is furnished by the United Gas Co. of Colorado Springs. ■



Buck Keil, superintendent of the Carlton Mill, checks the instruments controlling the L. P. gas-fired burners.

There's still time!

Build a summer load with this plan

This plan was presented during a panel discussion, "Building Summer Load," at the 10th annual meeting of the Western Liquid Gas Association. Its author, M. E. Wank, is president of Wank & Court & Lee Inc., San Carlos, Calif., advertising agency.

THE summer load problem plagues many operators, small and large. The smart ones are doing something about it. They take major steps to develop summer load in at least three directions: weed burning, commercial and industrial applications, and carburetion.

Each of these applications can be talked about at length. At this time suffice it to say that each has proved a profitable summer load builder.

Assuming, then, that you want to boost profits through increased summer load, and that you will choose one or several of the applications mentioned to build summer load, the question is, then, how to get started.

Your first job is to make up your mind, positively, that L. P. gas offers distinct benefits to your customers. This is not a silly statement. Too many LPG operators approach their prospects with a negative mind.

It's perfectly true that weed burning and commercial jobs and carburetion can be satisfied by competing fuels. But a careful study of LPG and the needs of your prospects will prove to you that there are certain applications in which LPG will perform better, cheaper, safer, more flexibly or more conveniently than any other fuel known. Don't sell LPG as a cure-all for everything. Sell it where it will do the job better—and sell yourself, first, so you can make a strong, positive sales pitch.

To get going on a sound basis, consider these suggestions:

1. Take a long, careful look at your own organization. Where do you hope to be two years, five years, ten years from now? Very few enterprises grow by chance. Growth is planned, and to intelligently plan, set up long-range objectives. Where are you heading?

2. Set up for yourself a series of very definite sales jobs. The completion of these jobs will be milestones along the road to growth. Make these jobs specific and definite. Don't say "I want to make more sales." How many more? What kind of sales? Instead, for example, decide, "I want 100 new carburetion customers by November 1959." With this kind of a definite goal, you can start a definite sales program and you can chart your progress toward your goal, month by month. Maybe you'll want to set up several projects to work at the same time. That's all right! But keep each project separate so that you can measure progress month by month.

3. Now that you know what you want to do, sit back and check up on whether the jobs you have outlined are realistic. How many carburetion prospects do you estimate there are in the area you serve? How strong is your competition for carburetion? What share of the market can you realistically hope to get by November? If necessary, revise your goal up or down. But be practical—be realistic!

4. Now you're convinced that you're on the right track. You are convinced that you can sell 100 new

carburetion customers by November. *How much increased profit is this going to bring in?* When you know this figure, you can set up a sales and advertising budget. You set up your budget to be *under* the anticipated increase in profit. Then, if you stay within your budget and accomplish your sales objective, you *must* make more profit. This is the kind of planning that you can sell to your hard-headed associates, your board of directors, or your banker. They, too, think in terms of profits.

5. Now that you have your sales objectives and your budget, make your promotional plans. You'll want to consider how many dollars should go to sales personnel, to display rooms, and to advertising. On advertising, call in the help of a competent advertising agency. They will advise you on media you may use and will prepare an advertising campaign that will be imaginative, honest, convincing, and packed with "sell."

6. Mesh this advertising campaign completely with the sales activities of your staff. In the LPG business, sales are generally made person-to-person; but advertising will make the work of your salesmen easier and more productive.

7. Take advantage of all available supplemental activities. Seek publicity wherever opportunity permits. Tie-in with the campaigns of manufacturers in your sales area. Seek sales helps from manufacturers in terms of available display materials and sales literature.

8. Just as soon as your program starts, start checking on sales results. You'll find bugs. Correct them! You'll find angles that seem very productive. Expand them! The important thing is to keep checking on results. Every day of every week, ask yourself "How can we do this job better?"

L. P. gas organizations who have used these procedures have increased their summer load; and at the same time, their operating profit for the year.

Even more important, the aggressive activity that developed, extended to an aggressive, *all-year* activity. And this, in the young, rapidly growing LPG industry, is the challenge that faces all of us. ■



An overall view of the sorghum mill with the grinding mill in the right foreground and the cooking plant in the left background.

traditional SORGHUM MAKING modernized with the aid of LPG

ROBERT CLAY • Managing Editor

***Business is
where you create it.
This unusual use of LPG
may give you an idea for
somewhat similar
markets in your area.***

THE term, sorghum, usually means a family of tropical and semi-tropical cereal grasses, but in the South it traditionally has been reserved for a sort of molasses made by boiling down approximately 10 gal. of raw juice from one of these grasses, sugar cane, to 1 gal. of syrup.

For generations, sorghum mak-

ing has been a back-breaking job for both man and beast. Now, a third-generation sorghum maker and his son have utilized LPG as a key power source in a modern sorghum mill. The result: two 1000 gal. LPG tanks and one pre-mix burner take the place of two men working feverishly to keep a huge wood fire supplied and at the ap-

Two 1,000-gal. LPG tanks alongside the cooking plant supply fuel to boil down raw sugar cane juice to sorghum. LPG consumption averages 120 to 180 gal. per day.





Heart of the cooking plant is this 4 x 12-ft copper cooking pan, heated by the pre-mix burner at right. Note baffles in the pan to send the liquid from side to side.

proximate proper temperature.

For 30 years, Carl Owens made sorghum the way his father and grandfather had on the family farm near Elkhorn in northwestern Tennessee. Then, several years ago, he ran across an article in *Farm & Ranch magazine* and it started him thinking. Correspondence with the publication resulted in Owens, his son Joel, and a county agent visiting a Boaz, Ala., sorghum mill, which became the model for the new Owens plant.

The sorghum process begins at the open-sided grinding mill, which is surrounded by shocks of freshly-cut cane. (Owens raises six acres of cane and processes the cane crop of many neighbors.) Mulepower was formerly used for grinding, but now an electric mill squeezes out more juice in a fraction of the time. The raw juice runs into a tank, where impurities and heavier particles settle to the bottom while the lighter and purer portion runs off through a pipe near the top.

The entire operation is gravity fed, utilizing a rise on which the mill is located and a split-level cooking plant designed by Owens. From the mill, the juice runs through a 120-ft pipe to the cooking plant. Entering on the structure's top level, the raw liquid goes into two more settling tanks, where again, the more pure juice is drawn off. It is now ready for cooking.

Superficially, the cooking unit is

of traditional design, with a brick base and a copper pan, that measures 4 x 12 ft. Set on a slight incline and containing angled width-wise baffles, the pan sends the thick, bubbling, steaming juice along a serpentine route, taking a full 30 to 40 minutes for the trip.

The modern difference is underneath. Instead of the old wood fire, a single long flame is supplied by one No. 3 Maxon Premix Burner located outside the brick base at one end. The low pressure pre-mix burner (1.7 million Btu - per - hr input) simplifies the operation by eliminating the need for mechanical vaporization. With the specially-designed flue at the opposite end, the right amount of draft and the burner-blower send the flame far

out under the copper pan, which quickly reaches 250 deg., the temperature that reduces the juice to exactly the right specific gravity for the proper consistency and taste.

A normal day's production is 120 gal. with a one-day record of 150 gal. With plans to increase his output, Owens has another burner to install in another pan, doubling his capacity.

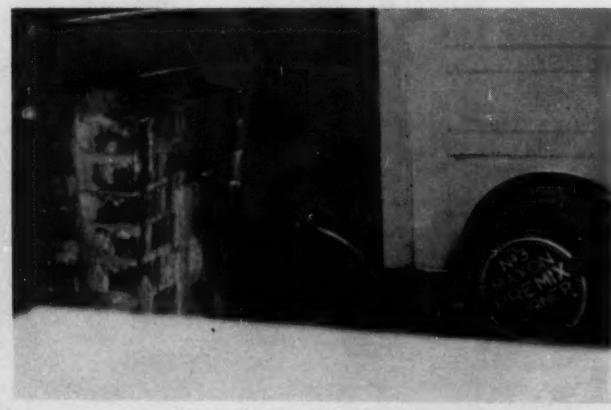
Why did Owens choose LPG? He needed a heat source that was highly flexible, coming up to operating temperature quickly and maintaining it constant, but able to vary it instantly when necessary.

Low operating costs were also a factor, LPG being more economical than other fuels in the area and burner maintenance being at a minimum. Fuel usage depends upon the starch and water contents of the juice. (It differs according to variety, crop conditions, etc.) The average is 1 to 1½ gal. of LPG for every gallon of finished sorghum.

An additional benefit of LPG is that carbon and soot do not form on the bottom of the pan to slow heat transfer, as would happen with other fuels.

With facilities available to double his production—and use of LPG—Owens' next move is in a merchandising direction: distinctive labels to promote his own brand of sorghum. He is also looking forward to processing more of his neighbors' cane, for they are glad to pay him both a commission plus a percentage because the LPG-produced sorghum from his modern mill brings a higher price! ■

Close-up shows installation of the single 1.7 million Btu input per hr pre-mix burner that heats the entire 12-ft-long pan.





ASSOCIATIONS

LPGA convention is one of the largest in history; 140 exhibitors showed wares

THE LPGA closed out another year of significant accomplishment before one of the largest turnouts in history when it met for the 28th annual convention in Chicago in early May.

An uncooperative weatherman, who turned on an unseasonable hot spell two days before the big show started and held it on through the final day, failed to take the fine edge off the association's cavalcade of successful events. He succeeded only in turning some of the gatherings into shirtsleeve affairs, which was only appropriate in light of the vast amount of business conducted at the meeting.

More than 140 manufacturers and distributors showed their newest lines in an impressive display that spilled over the north and south exhibition halls into the lower lobby and the second-floor registration area. Attendance was large and the flow of onlookers steady during the four days the show was open.

As is customary, the old officers yielded their posts to a new slate, sworn into office during the board of directors' meeting held the last

was won by Otto Williams of Bottled Gas Corp. of Virginia.

The achievements of the past association year were recounted with some abridgment by Arthur E. Bone, the retiring president, in his report to a capacity luncheon crowd. Among the most noteworthy achievements:



A bit of gavel exchanging went on at a luncheon session between Arthur E. Bone, retiring president of LPGA, and Martin Steinlicht, Mobridge, S. D., convention chairman.

- Freight rate reductions of as much as 36 per cent or \$250 a tank car.

- The enrollment of nearly 8000 people in LPGA-sponsored training courses.

- Publication of the first volume in LPGA's service training course.

- Participation in the consolidation of NFPA pamphlets 52 and 54 into a single national standard for gas piping in homes. The joint work of the association, utility companies, and other interested organizations, the standard is now about ready for adoption.

- Advocacy of passage by Congress of "equal interest" bills to offset some of the advantages of the REA. The bills would force upon them higher and more equitable interest rates.

- Stimulation of members to engage in political activity.

- Publication of a statistical handbook and a motor fuel station directory.



F. L. Fagan
LPGA President

morning of the convention. There were no upsets in the balloting, F. L. Fagan of Gem Automatic Gas Co., "Mr. LPG" to the citizens of Granite Quarry, N. C., being elevated to the presidency and Rudy Munzer of Petrolane, Long Beach, Calif., replacing Fagan as first vice president. Munzer's old post, the second vice presidency,



The nation's No. 1 gas range salesman, Carl Sorby, was presented the LPGA's distinguished service award by K. H. Koach, Green's Fuel, Sarasota, Fla.

Bone's report shared the luncheon program with the presentation of the distinguished service award, the introduction of the Gold Star Range promotion, and the announcement of the National LP-Gas Council's \$100,000 Sweepstakes. E. Carl Sorby, "Mr. Roper Range," was tendered the DSA by K. H. Koach, Green's Fuel Inc., who traced the career of the famous salesman in lucid, sometimes amusing detail.

Julia Meade lent her loveliness and A. F. Wikstrom (AGA) his Alabama eloquence, to a convincing pitch for the Gold Star program. W. F. Devoe (Phillips) made effective capital of the talents of a blazer-striped dealer and his beautiful-but-dumb secretary in dramatizing the advantages of participating in the National LP-Gas Council Sweepstakes.



The tremendous significance of the Gold Star program to the LPG industry was brought out in a talk by the AGA's S. F. Wikstrom before the opening luncheon audience at the LPGA convention.

An innovation which promises to be developed and repeated was the series of group discussion forums on accounting, advertising, general management, load balancing, plant operations, and radio communications. Lively discussions were engendered in the load balancing and plant operations meetings, in particular.

The final business feature of the 4-day convention was the round of sectional meetings. The marketers heard four prepared talks in their session—two on load building, one on specialized merchandising, one on cooperative advertising, and a report on the now-famous engine performance tests.

W. F. Lowe receives this year's Hanlon Award

The Hanlon Award, highest honor in the natural gasoline industry and one of the ranking awards in the petroleum industry, was conferred this year on William F. Lowe, executive director of the Natural Gasoline Association of America. The presentation was made at the 38th annual convention of the NGAA held in April in Dallas.

Lowe is the 23rd recipient of the award, which is conferred each year by the NGAA for outstanding service to the gas processing industry.

The presentation was made by NGAA President George T. Tennyson, Shell Oil Co., Houston. The citation read in part: "I think it safe to say that this man has been the catalyst and guiding force behind all NGAA activities during the last 25 years.

"He, perhaps more than any other individual, recognized the need for, and the value of, many of the cooperative studies that have become milestones of progress in our industry."

In 1934, Lowe was named secretary of the NGAA and was made executive director in 1957. He has represented the NGAA and the gas liquids industry in practically every national organization that has a bearing on natural gas products.

Corken develops theory at Wisconsin convention

Approximately 175 L. P. gasmen attending the Wisconsin L. P. gas spring convention at Stevens Point, heard Charles Corken, Corken's Inc., develop the theory that

part of the complacency found today in industry, and particularly among younger workers, is due to the lack of teaching of the fundamentals in the schools. He listed these fundamentals as logic, history, the simple mathematics of economics, and a desire to be self-sufficient and independent.

R. B. Davis, Tappan Stove Co., Allan Barry, Arkla Air Conditioning Corp., and Mel Justman, Infrared Heating Co., conducted a program on "How to Get New Business with New Products."

Ohio shapes plans for its service school

Plans are nearing completion for the three-day series of service schools which will be held at Ohio State University, Columbus, August 17-19.

The subjects to be covered include: controls—appliance and furnace; carburetion; regulators and piping; customer relations; and bulk plant and tank truck operation. These subjects were chosen as the most wanted and needed through a questionnaire sent to all L. P. gas dealers throughout the state by the service schools committee.

Instructors will be men in the industry who are well acquainted with their subjects.



Lewis A. Graeber, Jr. (left), receives the "Man of the Year Award" at the Mississippi L. P. Gas Dealers Association banquet during the annual convention at Edgewater Park, on April 12-14. With Graeber is W. W. Gresham, Jr., president of the association. The Award is presented annually to give recognition to the active member of the group who, during the past calendar year, has made the most valuable contribution to the betterment of the L. P. gas industry in Mississippi.

Two schools held just for truck drivers

Iowa State College extension division school of engineering on May 11-15 and 18-22 conducted two schools for truck drivers.

The schools were held at the request of Thermogas, Des Moines, and were exclusively for Thermogas employees.

Twenty-five Thermogas drivers attended each school. This is the first time there has ever been a school held exclusively for truck drivers.

Subjects covered included: Looking for Trouble; Tire Maintenance; Psycho-physical Testing; and Over-the-Road Testing, Safe Driving, Accident Protection, Fire Control and Public Relations for drivers.

Instructors included top men from: International Harvester Co., Goodyear Tire & Rubber Co., Pennsylvania State University, Iowa State College, Iowa State administration, and Iowa Highway Patrol.

If there is enough response from these first schools, plans will be made to conduct future sessions.

Lasky and Morgan elected chairmen of GAMA groups

Harry Lasky was re-elected chairman of the Water Heater division and Donald C. Morgan has been elected chairman of the Gas Meter and Regulator division of the Gas Appliance Manufacturers Association.

Lasky is vice president in charge of sales of Pennsylvania Range Boiler Co., Philadelphia.

Morgan is assistant vice president and products manager for gas products, Rockwell Manufacturing Co., Pittsburgh. He succeeds Thomas J. Watt, advertising manager of Sprague Meter Co., Bridgeport, Conn., who was elected to the GAMA executive committee.

Midwest service school attended by 65 men

Sixty-five students met on the campus of Iowa State College, Ames, on April 15-17, to attend the ninth annual Midwest L. P. gas service school.

The curriculum was based on Book I of the L. P. gas service training course. Plans were to give the students not only technical instructions, but instructions on customer relations, winning and



"WE LIKE TO DO BUSINESS WITH TEXACO AND CAN COUNT ON DEPENDABLE SUPPLY"

"We've been LP-Gas Distributors for over 12 years," says Paul J. Slegel, owner of Central Gas, Central City, Nebraska.

"In this area we use Propane for tractor and irrigation purposes, and have found Texaco LP-Gas to be tops for these uses.

"Dependable, on-time deliveries all year-round, and assurance of a high

quality product have made us very happy with our Texaco contract."

5 reasons why it pays to be a Texaco LP-Gas Distributor

1. A product of highest quality—moisture-free.
2. Dependable and efficient delivery, in a new fleet of tank cars, from 31 strategically located production areas.
3. Immediate acceptance. Texaco LP-

Gas is sold under the nationally famous trade-mark, the Texaco red Star with the green "T."

4. One of the largest producers of LP-Gas, Texaco is the only petroleum company to build up successful distribution of its products nation-wide.
5. Profitable and proved sales policies. Texaco does not compete with its independent distributors of LP-Gas.



Team your name with Texaco and profit. Let us tell you about the opportunities for a sound and profitable business with Texaco LP-Gas. Call or write today . . . Texaco Inc., LPG Sales Division, P. O. Box 2420, Philtower Bldg., Tulsa, Okla., Diamond 3-4101; 3350 Wilshire Blvd., Los Angeles 5, Calif., DUnkirk 5-0515.





An interesting session at the Midwest service school was the L. P. gas testing laboratory and lecture presented by Palmer Gray, Sinclair Oil & Gas Co.

holding goodwill, and "What the Modern Homemaker Expects from the Serviceman Today."

According to Naomi Shank, Iowa State College, Home Management, the housewife today expects the serviceman to be her best source of information on new products and to be willing to advise her honestly on product values.

AGA chooses its theme for 1959 convention

The American Gas Association has selected "New Horizons for Growth and Service" as the general theme of its 41st annual convention, October 5-7 at Chicago's Hilton Hotel. The theme stresses the basic objectives of the gas industry.

Prominent speakers from the gas industry and the business world will highlight the three general sessions, exploring prospects and opportunities in the fields of finance and economics, management, legislation, energy, gas supply, and sales.

Association Notes

North Dakota delegates to the joint Dakota L. P. gas convention at Huron, S. D., elected K. S. Backlund, Kenmare, president. Howard Kindt, Pierre, was named South Dakota president. Some 200 delegates and their wives attended the convention.

Edgar A. Jahn, assistant utilization engineer with the AGA for the past 12 years, has been appointed assistant director of AGA's Utilization Bureau. He joined the AGA staff in 1947.

Michigan LPGA's summer meeting was scheduled to be held June 25-27 at Johnson's Rustic Resort on the shores of Houghton Lake. Richard Lowe of Lowe Brothers Bottled Gas Co., Dimondale, is the chairman of the convention committee.

John A. MacDonald was recently appointed assistant controller of the AGA Laboratories, it was announced by F. E. Hodgdon, president. MacDonald has

been employed in an accounting capacity by Ernst & Ernst, as controller and general manager of Neff-Perkins Co., and as senior accountant, with Valley & Co., an accounting firm.

One hundred and three students received a certificate of completion from the Alabama LPGA sponsored service school held in April in Tuscaloosa. Jim Chaney was chairman of the service school committee.

CALENDAR

Coming events in the Industry

1959

June 30-July 1—Conference for drivers in the L. P. Gas Industry—Purdue University, Lafayette, Ind.

August 2-4—Kentucky LPGA Annual Convention and Trade Show—Kentucky Hotel, Louisville, Ky.

August 2-4—Alabama LPGA Annual Convention—Birmingham, Ala.

August 2-4—New Mexico LPGA Annual Convention & Trade Show—Albuquerque, N. M.

August 3-5—Oklahoma L. P. Gas Service School—University of Oklahoma, Norman, Okla.

August 9-14—L. P. Gas Service and Carburetion Conference—Sponsored by the Florida LPGA—University of Florida, Gainesville, Fla.

August 16-18—Nevada, Idaho, Utah—Joint Convention and Trade Show—Holiday Hotel, Reno, Nev.

August 17-19—Georgia and South Carolina LPGA joint mid-year meeting—Savannah, Ga.

August 17-19—Ohio LPGA service school—Ohio State University, Columbus, O.

September 11-13—Wisconsin LPGA Fall Convention—Egg Harbor, Wis.

All associations are invited to send in dates of their forthcoming meetings for this calendar.

September 13-15—North Carolina LPGA Annual Meeting and Convention—Sir Walter Raleigh Hotel, Raleigh, N. C.

September 17—Pennsylvania LPGA Convention—Cocoa Inn, Hershey, Pa.

September 18-19—Florida LPGA Annual Convention—Golden Gate Hotel, Miami Beach, Fla.

September 24—New England Gas Association Safety Conference—Statler Hilton, Boston.

September 25-26—Iowa LPGA Fall Convention—The New Inn, Lake Okoboji, Okoboji, Iowa.

September 28-October 1—American Welding Society fall meeting—Sheraton-Cadillac Hotel, Detroit, Mich.

October 4-6—Oklahoma LPGA Convention—Biltmore Hotel, Oklahoma City, Okla.

October 5-7—American Gas Association 41st Annual Convention—Conrad Hilton Hotel, Chicago, Ill.

October 8-9—California Natural Gasoline Association 34th Annual Fall Meeting—Huntington-Sheraton Hotel, Pasadena, Calif.

October 12-14—Northeast Regional LPGA Convention and Trade Show—Sheraton-Park Hotel, Washington, D. C.

October 29-30—13th National Home Laundry Conference—Statler Hilton Hotel, New York City.

SELL

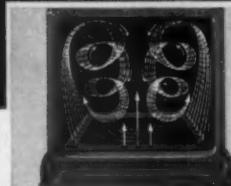
the good cook's gas range
...famous for nearly four generations!



Illustrated: The Universal Supreme
40-inch gas range—Model 9192

You and Universal sell better together

...because only Universal offers your customers the 3 "most-wanted" features in gas cooking! It's the famous brand name known and trusted for quality for 4 generations. Get the facts... contact your Cribben & Sexton representative now!



"Air-conditioned" Baking

Exclusive Super Oven with built-in circulation control keeps heat better balanced for perfect baking. This even heat is constantly circulated... no hot spots, no cold corners!



Smokeproof Broiling

Melted fats and greases can't smoke or burn because the specially designed broiler grille drains away and traps them in the pan underneath. Kitchens stay cleaner longer.



"Obedient Burner" Cooking

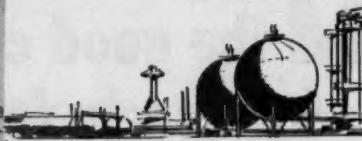
Each self-lighting burner obediently delivers the precise heat wanted, instantly. "Simmer-Save" feature permits an unlimited number of measured cooking heats.

Advertised in leading national magazines

UNIVERSAL

GAS RANGES

Cribben & Sexton Company, Chicago 12, Illinois. A complete line of domestic and commercial ranges, built-in ranges, dishwashers, space heaters and clothes dryers.



City Gas acquires Dade Gas Corp.

ANNOUNCEMENT of the purchase of the Dade Gas Corp. by City Gas Co., was made recently at the conclusion of the annual directors' meeting held at the City Gas main offices in Hialeah, Fla.

Acquisition of the Dade company, which serves L. P. gas to more than 30,000 residential and commercial customers in the Dade county area, marks another step in the City Gas five-year, \$5-million expansion program recently announced by Sam F. Danels, president.

The addition of Dade Gas to the City Gas system gives the latter a total of more than 45,000 customers in Dade and Broward county.

A purchase price was announced as being "in excess of \$2 million." Danels stated that no changes in management or operating personnel of the purchased gas system would be made.

Operating the nation's largest independently-owned pipeline system, with more than 550 miles in Dade and Broward counties, City Gas recently signed a contract with The Houston Corp. to purchase natural gas to be delivered to the City Gas pipeline system over the big 24-in. pipeline now nearing completion in the Miami area.

Danels announced that his company will spend at least \$1.5 million during 1959 on its expansion program, extending its present pipelines into areas scheduled for residential and commercial development, and improving existing facilities in anticipation of the advent of natural gas.

The initial limited supply of natural gas, already allocated, will start coming into the South Florida areas sometime this summer. Stepped up production will result in the full gas load arriving sometime in April or May of next year.

Predictions of a bright future in Dade and Broward counties in 1959-1960, particularly in the home-

building and labor fields, was made by Danels in his report to City Gas directors.

"A better mortgage market is helping the developers and builders, while industry, with low gas rates and a good labor market to choose from, can expect one of their best years in 1959," he said.

"A definite reduction in gas rates, resulting from the arrival of natural gas in full volume in Dade and Broward counties, is assured," Danels reported. "This should not only result in bringing new industry and new residents to our area, but also should prove of tremendous help to those industrial and commercial plants already here.

"Such increase in building and manufacturing is bound to eventually result in reduced prices for many commodities and greatly stepped-up production," he concluded.

Rates for the natural gas are yet to be set by the Florida Railroads and Utilities Commission at Tallahassee.

The City Gas Co. directors re-elected all present officers of the company, who are: Danels, president, S. W. Langer, secretary and general manager, Charles Roberts, vice president, Moe Langer, treasurer, Harry Blumin, comptroller, and J. T. Self, assistant secretary.

Flexible gas connector is under study by the AGA

The development of a flexible gas connector has just been added to what might be called the AGA's urgently-needed crash research program. This program involves development of appliances or hardware which the industry must have without delay to maintain its competitive position and enlarge the field of gas utilization.

The AGA started an investigation of automatic plug-in connectors in 1945 and '46. An excellent

report was issued by the Laboratories, but then the prototype of the plug-in device was acquired by a manufacturer and work was halted.

Since that time, many studies of semi-rigid and flexible connectors proved disappointing. Numerous tests have shown that both types of connectors may fail when the appliance is repeatedly moved, then returned to its original position.

In 1955, the Domestic Gas Research Committee started a flexible connector project. A national survey gave AGA the necessary cross-section of opinion and information upon which to base a national program and a set of criteria or objectives for the design and development of an improved connector. These specifications were submitted to Battelle Memorial Institute which undertook to design, develop and test a prototype that would meet them.

The conclusion of these studies indicated the need for a connector with the temperature resistance of metallic tubing and the enduring flexibility of plastic or synthetic rubber hose. Both of these properties have been obtained in the neoprene-covered brass bellows connector.

As a result of the investigation for the selection of metal, red brass was found to have the most desirable characteristics for the internal convoluted tube.

Preliminary cost estimates of the rubber-covered convoluted tube connector show that a 4-ft connector can be manufactured for approximately \$1.00 per ft.

A field testing program, conducted by a group of gas companies coordinated by the AGA, is the next step. It is expected that the number of connectors tested will be somewhere around 150 and they will be in sizes from $\frac{1}{2}$ to 1 in. nominal diameter.

It is hoped that a full report on the field tests will be submitted to industry by the end of 1959.

While flexible connectors can be extremely useful in themselves, their practical value should be greatly multiplied by their use in conjunction with automatic plug-in devices.

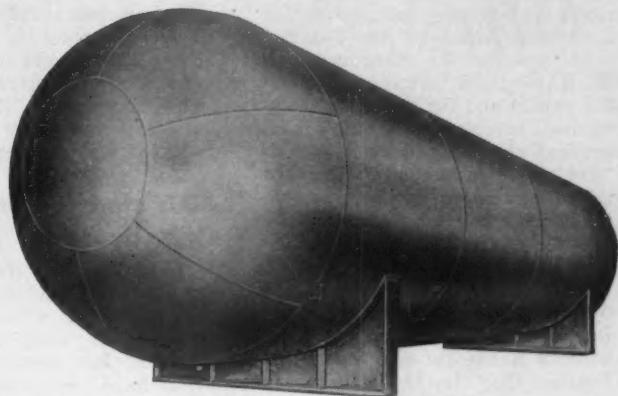
Eventually, according to the men testing the device, gas connectors should become as familiar as electric cords.



...for a better *Contract* **CHECK**

✓ STORAGE

Break the bonds of limited storage capacity with Master LPG Storage Vessels. We build to your specifications in ANY size. Full X-rayed seams assure absolute safety. Meets all code requirements. Send for Master Storage Folder.



✓ TRANSPORTS

Dealers' choice . . . MASTER transports of miracle light-weight T-1 Steel for BONUS payloads. Engineered and built to meet your specifications up through 10,000 water gallons. Fabricated to meet the latest codes. Fully X-rayed and sand blasted. Recessed fittings. Simplified plumbing system. UL Approved. Send for Master Transport Folder.



✓ DELIVERY TRUCKS

The "Time Saver" is a money saver for LPG operators—featuring a hose reel located in a side cabinet for simplified sidewalk delivery. The fire extinguisher is mounted in a recessed cabinet on the left side of the truck. Two cabinets at the rear carry extra fittings and valves. All fittings are recessed; all seams are 100% X-rayed. Available in capacities up to 2400 water gallons.



MASTERPIECES OF
STEEL FABRICATION



TANK &

WELDING

2000 S. Front St. • Quincy, Illinois • Baldwin 3-5014
P. O. Box 5146 • Dallas, Texas • Riverside 7-2441



Arkla plans gas stations; will feature LPG

Arkansas Louisiana Gas Co., the large southern utility and a veteran producer and wholesaler of motor fuels, announced in mid-May that it will soon market these fuels on a retail basis. Operating through a wholly-owned subsidiary, Arkansas Louisiana Chemical Corp., the company will have gas stations in Louisiana, Arkansas, and Texas.

In making the announcement, W. R. Stephens, president of both the parent and the subsidiary companies, revealed that the independent chain would be known as "Arkla Service Centers." He added that construction on the first center had started at El Dorado, Ark., and the station would be open by late summer.

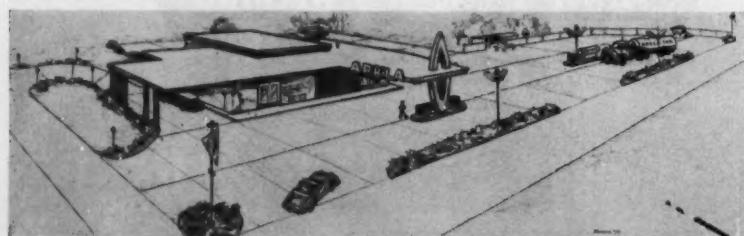
Under immediate consideration for similar stations are Little Rock, Russellville, Texarkana, and Magnolia in Arkansas; Shreveport and Bossier City in Louisiana; and Pittsburg and Jefferson in Texas. (Arkla Chemical is located in Little Rock and Shreveport.) Other locations in the three states are planned, Stephens said.

The stations will provide a complete line of fuels from the firm's eight gasoline plants in the three states. This includes butane and propane, where market conditions warrant, Stephens emphasized.

A unique feature of the service centers will be an adjoining display room where products manufactured by Arkla will be shown. These include: Gaslites, Arkla-Servel All-Year gas air conditioners, Humphrey gas heaters, other gas appliances, fiberglass boats, and horse-drawn carriages.

Where feasible, the centers will have drive-in windows with a full-time attendant to serve gas utility customers who want to pay their monthly bills or apply for gas util-

Architect's rendering shows clean contemporary style of the Arkla Service Center, a public relations plus for the gas utility and LPG industries.



ity service. Credit cards will also be issued.

Stephens pointed out that the firm has produced fuels of various types for more than 30 years and in the past ten years has sold more than 1 1/4 billion gal. of petroleum products, including LPG. He described the service centers as a continuation of the firm's broad diversification and expansion program launched in 1957.

"Our company is striving to develop and expand its utility and non-utility operations to provide better service for its customers and create more jobs for people in the three states it serves."

AGA studying promising utilization item

The AGA is currently sponsoring a study on a new, promising utilization item, a thermionic converter which would directly convert heat into electricity. Several units have been analyzed and tested by the AGA to date.

Direct conversion of heat into electrical energy offers many advantages over the more customary approach, which involves an intermediate conversion of heat into mechanical energy. Since direct conversion devices do not involve moving mechanical parts, one of their main advantages is that they can operate for long periods with practically no supervision.

It is expected that, out of work now being done, many new applications will be opened up in the not-too-distant future.

One of these converters, a close-spaced diode, has many applications in the field of auxiliary power. Initially, it will be used in remote stations; possibly for meteorological stations, lighthouses, buoys and remote military installations.

At a later date it may be available for use in remote residential sections, on farms and boats, and with the military in missiles, rockets, and space vehicles.

Such direct-conversion devices can be adapted to use any source of heat—including, of course, gas.

NEWS NOTES

Peerless Heater Co. announces the appointment of Peterson-Contarsy as representatives for Peerless heating products in all counties in California, south of and including San Luis Obispo, Kern and San Bernardino, plus the Mexican state of Baja and Clark County, Nev. Also announced is the appointment of Hicks & Theisen Inc., as sales representatives for Wisconsin.

Linde Co., a division of Union Carbide Corp., announces the appointment of Pacific Delta Distributors, Inc., San Jose, Calif., as distributor for propane cylinders in northern California, southern Oregon, and Nevada. Warehouse facilities, now in South San Francisco, will be transferred to 5101 Monterey Ave. in San Jose.

Mobil Oil Co.'s refinery in Buffalo, N. Y., is planning to market L. P. gas, a new field for it. The refinery has filed plans with the city of Buffalo for the installation of four buried 30,000 gal. tanks to contain propane. Thomas C. Lockhart, manager, said the refinery plans to install facilities for drying, storing and loading the 20,000 gal. produced daily into tank trucks.

George E. Davidson has joined the Uregas Companies as general credit manager. In his new duties, he will have his office in Moberly, Mo., at the general office. He was formerly with Madison - Faessler Tool Co., where he was executive administrator. Stanley Thompson, formerly general credit manager has been promoted to office manager of the Quincy, Ill., branch.

Industry investment in the National LP-Gas Council set a new all-time record in April 1959. April contributions totaled: \$62,058.93. Total industry investment in the Council for the first four months of 1959 is up 27 per cent, or \$42,000, over the same record-high period last year.

Reznor Manufacturing Co. has just published a Distribution Practices Code, which outlines the firm's obligations and responsibilities in support of its wholesalers. While the code has been in effect for many years, David R. Webster, company president, said this is the first time it has appeared in written form.



kitten quiet...

easiest to keep clean...



...and the

heat exchanger is

PROTECTED BY

Jetglas -C



DAY & NIGHT UNIT HEATER

Missile nose-cone durability has given birth to important by-products like Jetglas-C, the miracle protection for heat exchangers on Day & Night unit heaters. Can't burn out, can't rust out, can't wear out! Add that to design advantages that provide for easy installation, easy cleaning and maintenance, super-quiet and efficient operation—and you have the finest unit heater on the market today. For complete information, write to:

DAY & NIGHT MANUFACTURING CO.

855 Anaheim-Puente Rd. • La Puente, Calif.



Ground is broken for new \$4 million Robertshaw-Fulton plant. From left: Frank H. Post, vice president, Robertshaw-Fulton, and general manager, Robertshaw Thermostat division; T. T. Arden, president; and Christy Payne Jr., vice president, Peoples Natural Gas Co., Pittsburgh.

Robertshaw will replace two plants with new one

Robertshaw-Fulton Controls Co. has started construction on a \$4-million plant in New Stanton, Pa., which will replace present plants at Youngwood and Scottdale.

T. T. Arden, company president, said the new plant will increase production capacity of the firm's Thermostat division by 50 per cent.

The plant is being built on a 260-acre site. It will consist of a three-level office building and two manufacturing buildings and will have 265,000 sq ft of manufacturing space and 62,000 sq ft of office space.

Texas Natural to construct gas liquids plant

John T. Oxley, president of Texas Natural Gasoline Corp., announced recently that Texas Natural has entered into contracts with Gulf Interstate Co., Houston, Texas, to construct a natural gas liquids plant on the Columbia Gulf Transmission Co.'s natural gas line extending from Louisiana to eastern Kentucky.

Capacity, exact location, etc., have not been finalized and will be announced at a later date.

It is anticipated that this plant will be placed on stream in early 1960. Texas Natural will own, engineer, and operate the plant. Gulf Interstate Co. will receive a percentage of the plant net profits after pay-out.

NEWS NOTES

Net earnings of \$724,739 were reported for the first three months of this year by Suburban Propane Gas Corp. This figure was slightly higher than the \$713,512 reported for the same period in 1958. Commenting on sales, Mark Anton, president, said that a record was established in clothes dryer sales. Over 1500 dryers were sold during the three months, as compared with less than 500 in any previous 12-month period.

The demand for LPG for fuel and chemical uses in February was 24 million gal., 5 per cent less than a year ago, according to a report from the United States Department of the Interior, Bureau of Mines. Stocks of liquefied gases totaled 468 million gal., 93 million gal. above a year ago, and underground stocks totaled 276 million gal. on Feb. 28, an increase of 52 million gal. from a year ago.

William A. Payne has been appointed manager of Bottled Gas Corp. of Virginia in the Fredericksburg district. Acting manager since December, he fills the office left vacant by the death of G. P. Watkins Black.

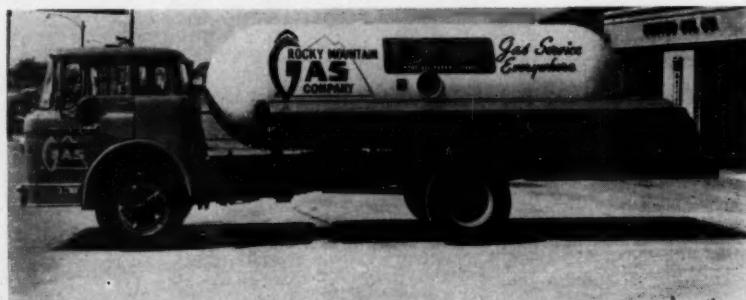
General Gas Corp. reports increases of 12 per cent in consolidated net sales and 36.8 per cent in net earnings during the first quarter of 1959. Sales of L. P. gas during the first quarter of 1959 increased approximately 6 per cent over 1958 first quarter sales, rising from 28,950,000 to 30,759,000 gal.

The A. O. Smith Permaglas division recently announced plans to relocate its domestic water softener business in Kankakee, Ill. To be completed by May 15, the move includes transfer of the water analysis laboratory from Omaha to the A. O. Smith Product Service division in Chicago.

A recent U. S. Court injunction barred a water heater rebuilder from using American Gas Association's approval seal. The association's policy limits use of the seal to new gas appliances conforming exactly to a prototype previously tested and approved by the association laboratories. The court ruled that the seal is a registered certification mark belonging to the AGA, which has exclusive rights to its use.

Superior Propane Ltd. has announced purchase of Gerow Propane Ltd. of Brockville, Ont. The sale involves several hundred customers, plus cylinders, regulators, and a transport tanker. Superior also purchased the Kenebec group of companies in Quebec. This includes Kenebec Propane Gas, Kenebec Propane Gas Service and Gaz Propane du Nord, with bottling plants at Quebec City and Murray Bay.

One of the largest distributors of L. P. gas in the south and a major outlet for home and commercial appliances has been selected by RCA Whirlpool for retail distribution of its products in north Georgia. National Utilities has five stores and plants that are strategically located from Atlanta northward to the North Carolina line.



This high-tensile steel LPG truck tank was fabricated for the Rocky Mountain Gas Co., Salt Lake City, by Eaton Metal Products Co. The tank is a 2400 cu. ft. mounted on an F-700 "tilt cab" Ford. Equipment used on the unit includes a Blackmer liquid pump; Hannay dual electric hose reel; Hewitt Robbins twin LPG hose, 1 1/2 in. Neptune Print-O-Meter and remote controls for clutch and power take-off. The entire unit, with full equipment, has a tare weight of 13,325 lb.

Humphrey...a famous name
in GAS HEATING...is now a member of
the family of products made
by ARKLA...a famous name
in GAS Air Conditioning.

The HUMPHREY line...a national leader in
quality gas appliances for many years,
will be continued by ARKLA.

ARKLA will retain the high standards of design
and performance maintained by HUMPHREY.
We also recognize and accept the responsibility
for continued research and development in
the field of GAS burning appliances.

ARKLA intends to maintain an efficient and
friendly dealer-manufacturer relationship.
In certain areas dealerships are still
available and we invite inquiries.

The HUMPHREY Division products include:

- Multi-Directional Unit Heaters
- Blower-type Unit Heaters
- Radiantfire Circulators
- Duct Furnaces
- Forced Air Furnaces
- Recessed Wall Heaters

Humphrey Division • Arkla Air Conditioning Corporation
Shannon Building • 812 Main Street • Little Rock, Arkansas



Winners of Fuelane Corp.'s recent sales contest embark from the plane which took them to Bermuda. They are (left to right): standing at bottom of steps, Mrs. Alvah Mallory of Central Maine Gas Service, Bangor, Me.; and Mrs. John Franklin, John Franklin, Inc., Shippensburg, Pa.; in back of them, Mrs. Delbert Silmser of Wm. L. Smith Hardware Corp., Massena, N. Y., and Mrs. C. Reynolds Needham, Cartmell Sales & Service, Inc., Middlebury, Vt. Silmser is standing in back of his wife and Mallory is behind Mrs. Needham. At very top are Needham (right) and Franklin (left).

NEWS NOTES

J. C. Chenevert is now in business in Alexandria, La. His Chenevert Gas Co. can be contacted by writing Box 329 in Alexandria. Chenevert entered the petroleum business in 1920, and is now in his 40th year as an active marketer. He helped sell, install and service the first butane gas system in Louisiana.

Petrolane Gas Service Inc. reports increases of 13 per cent in sales and other revenue and 15 per cent in net income for 1958, compared to 1957.

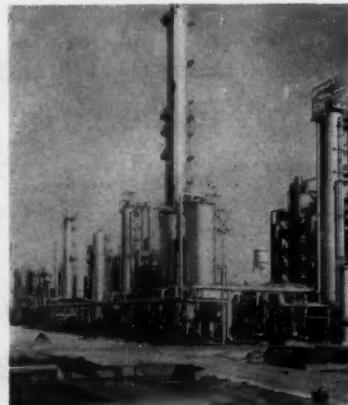
On May 1 the Texas Co. announced the change of its name to Texaco Inc., thus officially adopting the trade name it has used for many years.

A pair of pushbutton consoles will control the comfort of 15,000 office workers and an estimated 10,000 daily visitors in Chase Manhattan Bank's new headquarters in downtown Manhattan. Diagrams of heating and air conditioning systems for each of the

tower's 60 floors will be projected onto screens before engineers who will operate controls from automatic data centers. Designed and built by Minneapolis-Honeywell, it's the "largest indoor comfort control system ever devised." Completion is scheduled for late 1960.

Minneapolis-Moline Co.'s sales for the quarter ending Jan. 30, 1959, the first quarter of its fiscal year, rose almost 14 per cent from the like period in 1958. J. Russell Duncan, president, predicted that the company will show an accumulated profit for the first half—the first time in six years. A substantial portion of the increase in tractor business is based upon the growing demand for L. P. gas equipment.

Medart Auto Electric Co. Inc., St. Louis, has been appointed a Central Service distributor by Century Gas Equipment, Marvel-Schebler Products division, Borg-Warner Corp. Medart will cover eastern Missouri and central and southern Illinois and will institute a general field training program on L. P. gas carburetion.



One of the newest facilities of the vast Cities Service Refining Corp. is this recently completed Butane Splitter Tower in the new Isomerization Unit at Lake Charles, La. The 208 ft tower separates the mix-butane and isomerization product into two streams: an overhead product rich in isobutane and a bottom product which is essentially pure normal butane. A stream of 25,000 bbl per day is charged to the splitter. Photo supplied by Keasbey & Mattison Co., Ambler, Pa., manufacturers of Kaytherm, insulating material used in the tower.

Answers to Servicing Quiz from page 52

1. (c) The part carries a warranty.
2. (a) Try to find a reason for the failure.
3. (b) Ask her to repeat or pronounce it.
4. (a) Make the job more important.
5. (c) Suggest she does, but give her some recommendations for getting better use out of the appliance.
6. (c) Have clean uniform and haircut, use your tools and test equipment.
7. (a) Listen, she might clue you to trouble.
8. (b) You or the Dispatcher call back, apologize and set a new date or time.
9. (c) Minimize the trouble — making it seem easy to correct.

L. P. gas heaters keep theatre open in cold

Recently L. P. gas went to the movies at the Richmond Drive-In-Theatre in Kentucky, in the form of L. P. gas "in-car-heaters," according to the *Kentucky L. P. Gas News*.

The 50 Bernz-O-Matic heaters eliminate costly transformer housings, trenching, wiring, and field installation.

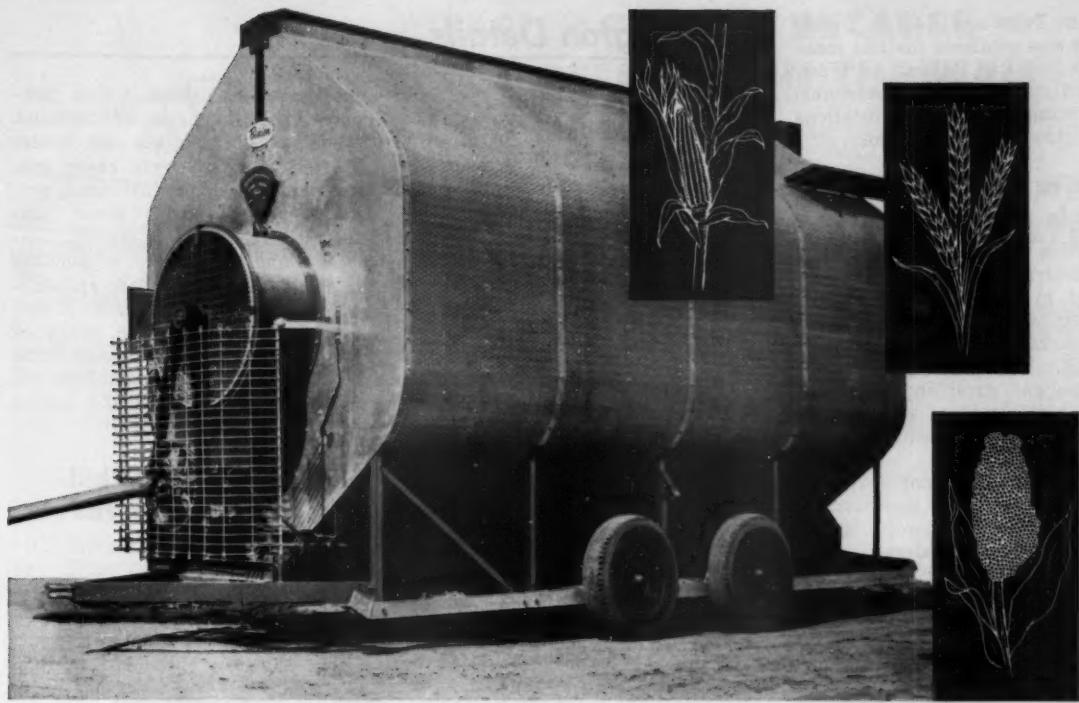
They operate on refillable 1-lb cylinders, each good for six to eight hours. Flameless, they are approved by Underwriters' Laboratory and the Kentucky State Fire Marshal's Office.

After obtaining the heaters, the theatre was able to stay open every weekend last winter. Previously, it closed for the season late in November each year.

Westcott & Greis becomes American Meter division

American Meter Co.'s subsidiary, Westcott & Greis Inc., became the company's southwest division on April 15. Harold W. Wahl, long associated with Westcott, is supervising operations as division manager with headquarters in Dallas. James H. Satterwhite, president of Westcott, is retiring.

Cade C. Clover has been named northern district manager with



This Grain Plus Just One Behlen Grain Dryer Could MOVE 10,000 GALLONS OF YOUR LPG A YEAR!

Doubly Welcome Sale! You'll Market in Your Off Season.

It's not at all unusual for a hard-working farmer to dry 100,000 bushels of grain a year... using an LPG-burning Behlen Batch-Type Grain Dryer.

It takes a gallon of LPG per 10 bushels of grain, on the average—so you see how this can mean 10,000 gallons of summer volume for you.

Many Behlen owners dry this volume by doing custom work for their neighbors as well as for themselves.

Over 97% of All Behlen Dryers Sold Burn LPG

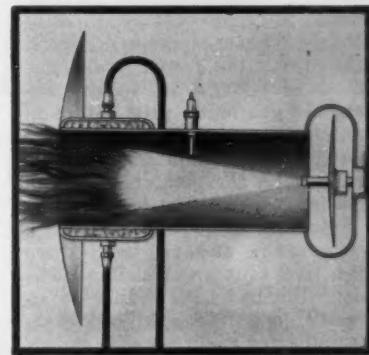
You gain a ready-made customer practically every time a Behlen Dryer is sold in your area. This is a money-in-your-pocket sales opportunity that can't be beat. But, that's not all. Remember, Behlen pioneered the use of LPG for grain drying. Longer years of experience with this fuel has made it possible for Behlen to engineer burners expressly for LPG. That's why farmers report, "No farm-size heat unit made, using LPG, can outperform a Behlen."

This is the kind of engineering that builds customer confidence in the fuel—as well as the burner and the dryer. Yes, Behlen has convinced farmers by the thousands that LPG is the ideal grain drying fuel.

Drop in on your neighboring Behlen Dryer Dealer. See the Behlen drying features that make Behlen a strong "unpaid salesman" for LPG!

For Complete Big Profit Details of This
Natural Dual-Sales Tie-In—
LPG + Behlen Dryer
Write:

Manufacturing Co.
Dept. BP-7
Columbus, Nebraska



This is the business end of a 500-bushel Behlen Batch-Type Grain Dryer. It can deliver 4,250,000 ± B.T.U.'s per hour... It burns 50 gals. LPG per 500-bu. batch, drying from 25% to 15% moisture content.



Meet A New Friend— The BEHLEN, JR., GRAIN DRYER

This newest member of the Behlen line—with 210 bushels capacity—is the economy model thousands of farmers have demanded. And, it's designed for LPG use.

offices in Tulsa and Earl B. Cutter Jr., the new southern district manager, is based in Dallas. All Westcott & Greis offices and personnel will continue in the same locations as the American Meter Co.

Arkla to build \$2 million plant in Arkansas

Location of a \$2 million factory at Russellville, Ark., has been announced by Arkla Air Conditioning Corp., a wholly-owned subsidiary of Arkansas Louisiana Gas Co.

W. R. Stephens, ALG board chairman and president, said construction of the plant would begin this summer. Stephens is also president of Arkla.

The Russellville plant will produce a variety of gas-burning household and commercial appliances, natural gas meters and industrial gas control devices.

Stephens said that a large volume of ALG's appliance research and development would be centered at Russellville.

Standby plant provides automatic supply

A standby propane-air plant recently installed by Drake & Townsend Inc. for Pittsburgh Plate Glass Co.'s new fiber glass plant at Shelby, N. C., provides a completely automatic emergency gas supply. Capacity of the system is 114,000 cfm of 1400 Btu, 1,287 sp. gr. propane-air gas at 30 psig. Start-up and shut-down are fully automatic and the system maintains constant pressure on the plant distribution system, regardless of load.

Equipment includes twelve 30,000 wg propane storage tanks; two high level tankcar unloading racks with 10 hp LPG vapor compressor; one 2000 gph Draketown steam-heated vaporizer with superheater; two 100 hp air compressors; and one Cutler-Hammer-Askania gas-air mixing system, including motor controls. The mixing system provides extremely close Btu control of the sendout gas with a turndown in flow through a range of 1001:1. Reduction of natural gas supply pressure below the plant requirement starts the propane-air system automatically and on restoration shuts it down. Manual control is provided for and many safety shut-down features are incorporated in the design.



Washington Details

REA loan subsidies to continue until '61

Failure of Congress to overturn President Eisenhower's veto of the Rural Electrification reorganization bill won't help slow government subsidization of power co-ops. But it will cause an important slowdown in drives for various big spending and radical legislation which were building up in Congress. The vetoed measure was a political test; a slap at Agriculture Secretary Benson, and an effort to prove that the lawmakers were in the driver's seat.

The strength the President's foes mustered, however, effectively wipes out any chance this year or next of success in the campaign to raise REA interest rates and substitute some private financing for government subsidy loans.

While the lawmakers failed to show the strength they thought they had, they did display more than enough power to block efforts of the Eisenhower Administration and private firms to boost the present 2 per cent REA loans to a figure which equals the cost of the loans to the government and to substitute some private financing.

Because the makeup of Congress won't change until 1961, there is little hope of success before then. If the Administration changes, the drive to end the subsidies may be buried for many years.

Housing bill could speed record building pace

The home construction boom is moving steadily ahead, and the prospect is for a summer jump due to congressional passage of new housing legislation.

Starts on new houses in April rose to 137,000 units, well above any previous total for the month including the previous peak home-building years of 1950 and 1955. This brought total housing starts for the first four months of this year to a new record high of 433,000, 38 per cent above the same period last year.

The number of new housing starts in both March and April, if continued all year at the same rate, would mean some 1.4 million units would be started this year.

This year's housing boom is coming in spite of generally tighter

mortgage conditions, which indicates the strength of demand. About one-third of the new houses started this year were under government mortgage insurance programs, compared to about one-fourth last year.

If Congress passes a pending housing bill, as expected, and it is not vetoed by President Eisenhower as too expensive, much of the tight-money pressure on home building will be lifted. The bill would directly provide \$2.1 billion in house construction aids.

Federal fair trade bill still faces long battle

Controversial new federal fair trade legislation has cleared one hurdle but still faces tough sledding and probable embroilment in a state-rights fight in Congress.

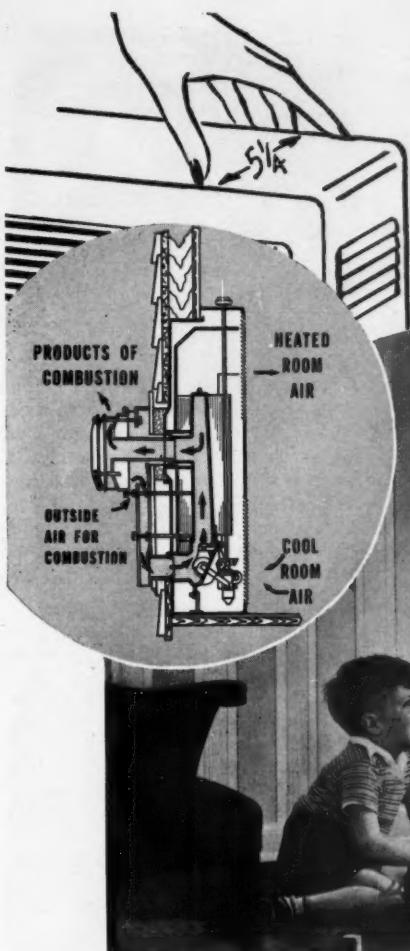
The measure, sponsored by Rep. Oren Harris (D.), Ark., chairman of the House Commerce Committee, would replace present laws which enable states to pass fair trade laws with a federal resale price maintenance act. Fair trade, under the present system, is in full effect in only 29 states now.

Rep. Harris' bill was approved by the House Commerce Committee despite strong opposition from labor unions, farm groups, and the government's two antitrust agencies. It is supported by retailers, and by some wholesalers and manufacturers.

The states rights tangle was partly recognized by the committee. A provision was added which declares retailing is a local industry and not in interstate commerce except for fair trade purposes. Backers of the bill were fearful that once retailers were covered by a federal fair trade law, they would be held to be in interstate commerce and thus subject to a wide range of federal laws which they don't want, including the minimum wage-hour law.

Opponents of the fair trade bill claim this attempt to limit the impact of the new law won't stand up, and that passage will lead to coverage of retailers by other federal laws. They also contend that the measure is an invasion of states' rights and will lead to more losses by the states.

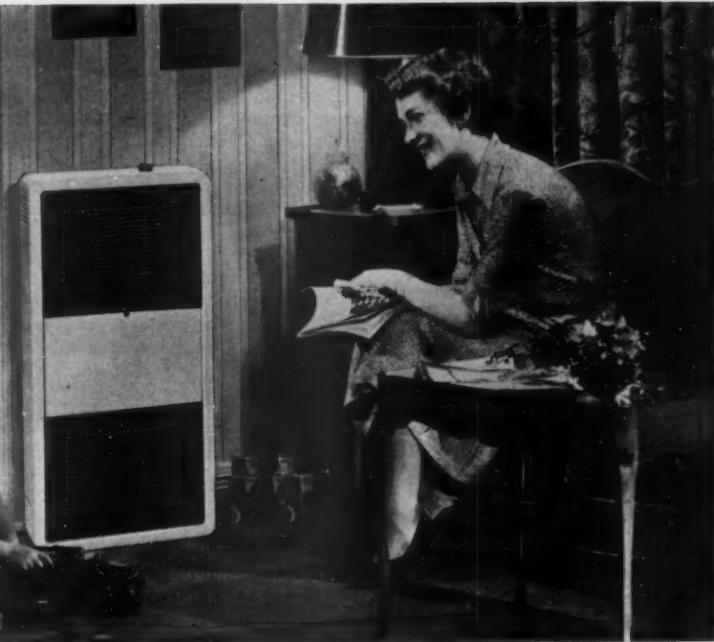
There is a chance that the bill's sponsors, in order to soothe the



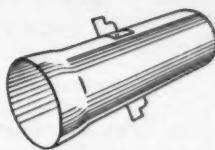
**EASIER TO SELL BECAUSE
IT'S RECESSED IN THE WALL**

SAF-AIRE
SAFETY- SEALED

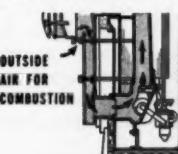
**AUTOMATIC
GAS HEATING**



Easy installation. Square hole simplifies installation in any type of wall.



Terminal exhaust tube is aluminized steel—will not rust or corrode.



Air for combustion enters the unit at bottom of burner assembly. Positive air direction minimizes pilot outage.



Easy servicing. Loosening two screws permits removal of entire burner assembly and controls.

Saf-Aire units are not only tops in automatic, safe and economical gas heating, but are styled in the modern manner. They really save floor space—extend only $5\frac{1}{4}$ " into the room. Their clean-lined design and handsome two-tone neutral enamel finish blend smoothly into any decorative scheme. That's why women concerned with the beauty of their homes prefer Saf-Aire.

Saf-Aire's "Safety-Sealed" design permits installation in bedrooms as well as any other room. The diagram above shows why combustion products can't enter the room, but are vented outdoors. Only outside air is used for combustion, hence room air will not become stuffy. Saf-Aire is easy to install in any wall—no chimney, ducts or electricity needed—burns all gases.

Send today for complete information

Symbol of
SW
Excellence

STEWART-WARDER
HEATING AND AIR CONDITIONING DIVISION
Dept. AT-79, Lebanon, Indiana

states' rights controversy, may have to add another provision which makes it clear that any state can pass legislation to remove itself from coverage. This is inherent in the measure, but it may have to be spelled out.

Farmers' spending money down from '58

Net farm income—cash left to spend after expenses—will fall by about \$1 billion this year, U. S. Agriculture Department experts now say. This is a drop of 8 per cent from 1958.

This decline will mean that farm families will have about \$12.1 billion to spend this year, still about \$1 billion more than in 1957.

The dip in farm income results from lower prices for farm products, coupled with higher expenses and a sharp drop in government soil bank payments.

Part of the loss in income may be made up by higher family income from nonfarm jobs, such as industrial work.

Many merchants serving rural areas expect a dip of about 4 per cent in sales to farmers this year. Crop-producing items, such as seed and fertilizer, probably won't be hurt much; new appliances and equipment may decline.

Small business loan money scarce

Retailers and other small businessmen are applying for loans at a rate that threatens to run the Small Business Administration out of money.

Congress is being asked by SBA for another increase in its lending authority. Under legislation sponsored by Rep. Perkins Bass (R.), N. H., the SBA lending fund would be increased by \$200 million above its present \$900 million.

This is not a direct appropriation, but establishes a revolving loan fund. The agency, in business five years, says that it will be another year or two before repayments on loans already made start coming in fast enough to meet the demands for new loans. In the meantime, it wants the increase in the fund to continue lending operations.



Merchandising

Sweepstakes winner to receive \$25,000 home

Frank DeVoe, president of the National LP-Gas Council and manager of L. P. gas sales for Phillips Petroleum Co., describes the Council's \$100,000 Sweepstakes (through which some lucky L. P. gas customer or prospect will receive a \$25,000 all-L. P. gas home) as "the biggest local-level sales promotion opportunity ever developed for L. P. gas dealers."

Promotion kits—with all the materials a dealer needs to make the Sweepstakes a success in his market area—will be mailed to all members of the Council early in July.

The Sweepstakes entry period will cover August and September, and the winner will be determined by a drawing in mid-October. Free materials in the kit include a publicity story, counter card, poster and banner, newspaper ad mats, radio commercials, customer mailer, Sweepstakes stickers, and blanks for ordering extra quantities of material.

Sales aids planning book available to executives

The Elbe File & Binder Co. Inc., manufacturers of loose-leaf products, has published an 82-page, 11 x 8½ in., plastic bound binder and sales presentation planning aid in limited edition.

Strictly a customer planning aid, the report explains the purpose, use, and construction of various sales promotion tools.

It is available to all executives requesting a copy on their company letterhead. Send 50 cents to defray cost of handling and shipping to Elbe File & Binder Co., 649 Alden St., Fall River, Mass. Ask for Book No. R63.

AGA announces \$30 million Gold Star promotion

"A \$30 million promotion for just 3 cents," that's the cost per copy for "Gold Star Living" magazine, says the American Gas Association of its new promotion.

"Gold Star Living" can be made the dealer's own magazine with his own full-page ads. It can also be used as a newspaper insert, direct mail piece, sales floor handout, and in a dozen or more differ-



A display available to Modern Maid dealers and distributors includes a 30 lb roaster for demonstration in the oven. It also shows that a drawer can be located 3 in. below the counter top. Point of sale features as well as color chips are included. A Modern Maid hood can be mounted above the range top.

ent ways to tell the Gold Star Story to customers.

The cost is \$30 per 1000 copies or 3 cents each. Minimum order is 1000 copies. The price is based on anticipated quantities for the industry and cannot be varied regardless of the size of the order, says the AGA.

For a complete Fact Sheet on the promotion, write the AGA, 420 Lexington Ave., New York 17.

Survey shows dealers want to receive Council mailing

Recently a questionnaire was mailed to all LP-Gas Council members to determine if they wanted to continue receiving the regular publicity packet mailings.

Of 1000 cards mailed, 287 were returned, a return of better than 25 per cent.

A total of 219 members said they wanted to continue receiving the mailings. As a result, all members will continue to receive the publicity packet mailings every other month.

AGA releases complete incineration portfolio

The American Gas Association has just released its 1959 "Commercial and Industrial Gas Incineration . . . Utility Information Portfolio," intended to help develop a new, profitable, year-around load.

A complete sales program with suggested approach and steps to take is one big feature. Other in-



ALUMINUMCASE AL-110-LPG METER —
 Designed for medium-sized homes with space heating and for small commercial loads. Compact, light weight, die-cast aluminum alloy construction provides high resistance to impact damage... reduces shipping and handling costs. Rated capacity 110 cft propane at $\frac{1}{2}$ -inch w.c. differential — 5 psi working pressure. Available with $\frac{1}{4}$, $\frac{1}{2}$ or $\frac{3}{4}$ -inch F.P.T. connections — shipping weight 17 lb.

HERE'S HOW LP-GAS LOADS GROW WITH AMERICAN® METERED SERVICE

LP-Gas meters bring "utility-type" service to your customers. Metered service builds confidence and helps you sell more gas and gas appliances for the 7 big household jobs. American LP-Gas meters save money for you, too — cut delivery costs by ending cross-hauling and out-of-fuel calls... make possible increased storage on customers' premises. More and more industry leaders every day are profiting from the load building advantages of American metered service.

WELDED STEELCASE WC-45-LPG METER —
 Light weight, sturdy, economical — ideal for average domestic services without central heating. Incorporates removable soldered top, internal, counter-type index, Nylon valve guides and bellows-type, molded Duramic diaphragms for LP-Gas service... lifetime corrosion protective finish. Rated capacity 45 cft propane at $\frac{1}{2}$ -inch w.c. differential — 5 psi working pressure — $\frac{1}{2}$ -inch F.P.T. connections — shipping wt. 8 lb.



AMERICAN®
METER COMPANY

INCORPORATED ESTABLISHED 1836



GENERAL SALES OFFICE: Philadelphia 16, Penna. • Albany • Alhambra • Atlanta • Baltimore • Birmingham • Boston • Chicago • Dallas • Denver • Erie • Houston • Kansas City • Los Angeles • Minneapolis • New York • Omaha • Pittsburgh • San Francisco • Seattle • Tulsa • Wynnewood • IN CANADA: Canadian Meter Company, Ltd., Milton, Ontario • Calgary • Edmonton • Montreal • Regina • Vancouver
 SUPPLIERS TO THE GAS INDUSTRY for Ironcase, Tinned Steelcase, Aluminumcase, and Welded Steelcase Meters • American-Westcott Orifice Meters • Instruments • Reliance Regulators • Apparatus • Valves

formation is on: equipment selection, wastes in typical installations, uniform standards and regulations, suggested specifications for commercial and industrial type gas-fired incinerators, and catalytic fume combustion.

The portfolio also contains: a survey sheet for waste analysis and determination of incineration requirements; case histories of successful gas incinerator installations; a paper entitled "Air Pollution and the Gas Industry"; suggested sales letters; samples of sales literature available from in-

cinerator manufacturers; and a listing of manufacturers of industrial and commercial incinerators employing gas, together with a listing of their distributors.

Roper offers variety of Gold Star sales aids

An assortment of Gold Star advertising, merchandising and sales promotion materials is offered its gas range dealers by the Geo. D. Roper Sales Corp.

The selling helps were created to enable Roper dealers to derive full

benefit from the \$30-million industry campaign. Newspaper ads, radio spots, direct mail folders, and a wide array of point-of-sale displays are among the items available.

The company's Gold Star gas range display background features a larger replica of the Gold Star emblem in three-dimensional plastic, with moving lights for added appeal.

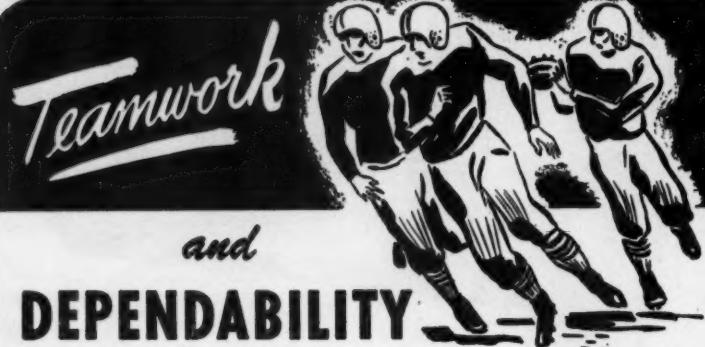
Merchandising Notes

Brunner division, Dunham-Bush Inc., West Hartford, Conn., appointed Standard Supply Co., 1011 Fifth Ave., S., Minneapolis, authorized distributor of its complete line of industrial and automotive air compressors for Minnesota, North and South Dakotas, and northwestern Wisconsin.

Copies of AGA's "Automatic Clothes Dryer Tip Sheet" are still available and timely at 3 cents each (in quantity). More than 200,000 copies have already been used by gas companies.

A \$1 million newspaper advertising campaign in 350 markets was set off in May by the Norge division of Borg-Warner Corp. Factory-paid, 1200-line, dealer listing ads for Norge refrigerators will be supplemented by dealer cooperative advertising during alternate weeks. "The ads will be black and stark enough to make a retail sale, yet emphasize quality," said Walter C. Fisher, director of marketing.

Suburban Propane Gas Corp., Rochester, N. Y., is promoting business with a newspaper advertising program that features the theme: "Now Is The Time to Go Gas." The firm offers to make free installations of bottled gas in homes beyond the mains. It also is featuring a rental plan on automatic water heaters.



DEPENDABILITY MAKE BEACON SERVICE Better!

BUTANE - PROPANE

Yes, our goal is to score a touchdown with a dependable Butane-Propane service. Beacon's policy of efficient teamwork within the company assures dealers everywhere of dependability and quick delivery on their Butane-Propane.

Join the hundreds of satisfied dealers and order from Beacon.

- L-P GAS PRODUCTS
- NATURAL GASOLINE
- REFINED PRODUCTS

• P H O N E
• L U t h e r
• 5 - 5 5 5 3

T U L S A

BEACON
PETROLEUM COMPANY
P. O. BOX 2100 • PH. L U t h e r 5-5553 • T U L S A, O K L A.

The very popular 8-page article, "America's leading industries use L. P. gas fork lift trucks," reprinted from BPN, May 1957, has now gone into its second printing and is again available at 20 cents each. Quantity discounts: 10 to 49 copies, 20 per cent; 50 copies and up, 30 per cent.

Radio news report provides sales lead for alert LPG men

DATE—Jan. 21, 1959. District Manager Bob Baehren and "Pyrofax" gas distributor Ogden Mills of Mills Welding Supply Inc., Buffalo, N. Y., had spent the day together calling on customers and contacting prospects. That evening they were sitting quietly in Mills' home when the 11 o'clock news brought word that a freighter had broken loose in a Buffalo canal and had knocked out one of the main bridges.

The news broadcast included the fact that the Higgins Construction Co. had been given the contract to clear away wreckage and would begin work on the project at 7 a.m. the next morning. Then and there Baehren and Mills decided that they, too, would be on hand the next morning—to sell the contractor on "Pyrofax" Gas Service.

Needless to say, the idea proved profitable to all.

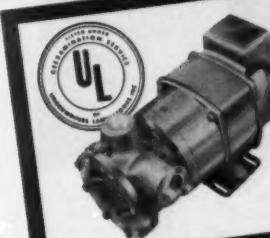
As a result of this quick thinking, Mills sold six cutting outfits and made two 8-cylinder multiple installations. He also loaned the contractor some salamanders as the temperature was 7 deg. above zero.

Forty-eight cylinders were consumed in the first eight days and before the whole job was completed, Mills Welding expected to sell twice that amount, a perfect example of the unlimited opportunity for volume sales in the industrial field.

Courtesy Pyrofacts

THE HIGH PRESSURE SALESMAN...



... will help you sell more fork lift installations — put more money in your pocket—and make good friends too!

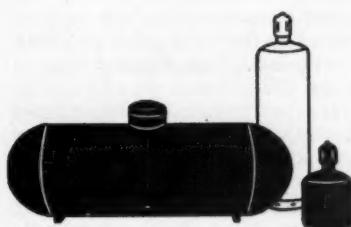
Reason? Corken Coro-Flo pumps, especially the $\frac{1}{2}$ HP C-9 and $1\frac{1}{2}$ HP C-12 were specially designed for high pressure service like this—and they're so quiet that the dispensing unit can be installed anywhere. So dependable that they will give years of trouble-free service.

Write for the New Coro-Flo Bulletins VF-100 and VF-102

THERE'S A CORKEN DISTRIBUTOR NEAR YOU

CORKEN'S, INC.

P. O. BOX 1062 • CE 5-5517
OKLA. CITY, OKLA., U.S.A.





THE TRADE

RICHARD C. LARKE was appointed national advertising manager for the Norge division of Borg-Warner Corp. He comes to Norge from Royal McBee Corp., where he was a merchandising manager.



R. C. Larke
Norge Div.



L. H. Hoelter
A. O. Smith

A. A. BARNHART was appointed manager of the Eastern division of Cribben & Sexton Co. and will headquartered in Newark, N. J. He had been manager of the firm's East Central division since 1952.



A. A. Barnhart
Cribben & Sexton



L. R. Farber
Temco

THOMAS H. SCHWESINGER has been appointed manager of the East Central division of Cribben & Sexton Co. He fills the position formerly held by A. A. BARNHART, who recently was appointed manager of the firm's Eastern division. Schwesinger's territory consists of the entire state of Ohio, western half of Pennsylvania, entire state of West Virginia, and the eastern half of Kentucky. He will headquartered in Cleveland.



T. S. Schwesinger
Cribben & Sexton



G. T. Bowman
Rockwell

L. H. HOELTER has been named sales manager of water softener products of the Permaglas division of A. O. Smith Corp. He joined the company in 1941 and served in various sales and managerial positions with Permaglas.

JACK CROSSMAN has been promoted to western regional sales manager for Marvel-Schebler Products division, Borg-Warner Corp.'s outlet for Century and Marvel L. P. gas carburetion equipment. Crossman, formerly a sales manager in Marvel-Schebler's Decatur, Ill., home office, will headquartered in Lynwood, Calif. National sales manager duties will be handled temporarily by F. E. PILLING, vice president and general manager. Key men on Crossman's sales staff are HERB FRAMBES who will work from Los Angeles and CHARLES GARRISON from Portland. H. E. APPLEQUIST takes over the post of service manager in the Lynwood branch.

Union Petroleum Corp. announced the appointments of J. WILLARD ROARK as vice president in charge of sales and CARL E. ENGLING as vice president and general counsel. Roark was associated with the L. P. gas industry for the past 28 years and Engling for the past 8.

ROBERT L. WHITE was promoted to advertising manager of Walworth Co. He has been with the advertising department for eight years.

LOUIS R. FARBER has been appointed marketing manager of Temco Inc., but will continue as advertising and sales promotion manager.

CHARLES W. KRAUSE was promoted from eastern regional sales manager to general sales manager for all Neptune Meter Co.'s liquid meters. Filling Krause's former position is JAMES C. JUDGE, who moves from the company's Portland, Ore., branch office, where he was district manager. Other sales department changes include the naming of G. W. MOORE as Philadelphia district manager. Moore's former position as sales representative in upstate New York is now handled by JOHN J. MORAN, who previously represented the firm in the New York City area. The company's "Capital District," which was handled by M. J. SIEBERT (now retired), was incorporated into Philadelphia District sales territory and is now covered by H. J. SIEBERT and RUSSELL RUTAN.

JOSEPH H. HOFF is the new factory district manager for the Payne Co. Hoff brings with him 12 years of sales and technical experience.

G. J. TANKERSLEY, president of Western Kentucky Gas Co., Owensboro, was elected a member of the board of directors of Arkla Air Conditioning Corp., recently. He is also president of Kengas Inc., a subsidiary of Western Kentucky which distributes L. P. gas.

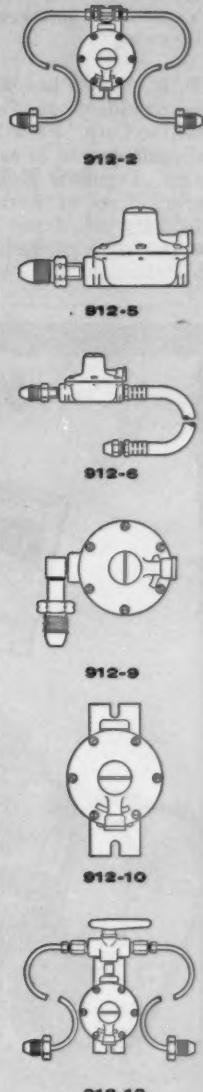
GILBERT T. BOWMAN, assistant vice president of Rockwell Manufacturing Co.'s Meter and Valve division, has been elected a vice president of the company. He joined Rockwell in 1940, became a district sales manager in 1945, sales manager in 1952, general products manager in 1954, and was promoted to his most recent position in 1956.

HUGH C. NEWTON is now assistant director of public relations for Rockwell Manufacturing Co. Prior to joining Rockwell, he was its public relations representative as an account executive for Burson-Marsteller Associates.

WILLIAM HARRISON FETRIDGE joined Diamond T Motor Truck Co. as vice president and director of sales. Previously he was executive vice president of Popular Mechanics Co.

The board of directors of Crane Co. recently elected THOMAS EVANS chairman and chief executive officer. Evans announced that L. H. T. CLEGG, for many years president of Crane's Canadian subsidiary, has been named acting president of the parent company filling the vacancy created by the resignation of NEELE E. STEARNS. New directors elected to the Crane board, in addition to Evans, are ALFONS LANDA, ROBERT B. CRANE and E. A. LOCKE JR. GEORGE F. BURLEY was reappointed vice president for sales and the establishment of three other major sales positions was announced.

**Serves more people
than any other
regulator**



FISHER ENGINEERED FOR TROUBLE-FREE SERVICE

- Rugged construction in every detail for long, trouble-free life.
- Maximum effective area of strong sensitive diaphragm.
- Accurate, powerful, friction-free lever mechanism.
- Large, newly improved bug-proof vent.
- Sturdy, clean pipe connections $\frac{1}{4}$ " inlet, $\frac{3}{8}$ " outlet.
- Large orifice minimizes freeze-ups.



FISHER GOVERNOR COMPANY Marshalltown, Iowa

FISHER[®]
Controls

SINCE 1880

DARRELL R. NORDWALL, general manager of branch sales; CHARLES H. LOVELACE, general manager of engineering sales, and R. W. LINDSAY, general manager of wholesaler sales.

O. M. BAILEY has been appointed vice president of Texas Natural Gasoline Corp. He will handle special assignments in sales and marketing. Formerly vice president of Green's Fuel of Florida Corp., a subsidiary of Texas Natural, he was in charge of the Atlantic Fuel Co. division at Lake Worth, Fla.

TOM JOHNSON is the new assistant manager of the Mid-West Sales division of Caloric Appliance Corp. He will be headquartered in Des Moines, Iowa.

WILLIAM FAY and WARREN SCOTT were appointed to newly-created posts in Minneapolis - Honeywell Regulator Co.'s Temperature Controls Group. Fay was named chief design engineer for the TCG panel division in Minneapolis, while Scott was selected as product manager for residential air conditioning and low-voltage thermostats.

HARRY R. THOMAS has established offices in the Enterprise Building, Tulsa, as a management consultant to the light hydrocarbons branch of the petroleum industry. He resigned his former position as vice president and general manager of Tuloma Gas Products Co.



H. R. Thomas
Consultant



W. N. Austin
Dixie Products

WILLIAM N. AUSTIN has been appointed director of marketing for Dixie Products Inc. He comes to Dixie from the faculty of the Institute of Management Development, Lausanne, Switzerland, where he was research associate in marketing.

JOHN STORM was made sales manager to Welbilt Corp's Garland division. He resigns his duties as sales manager of the Detroit Jewel and AB domestic range divisions. The Detroit Jewel and AB divisions were consolidated under the direction of MARTIN B. COHN, who is sales manager of the domestic and contract divisions.

ROBERT W. MANNING is now associated with the sales department of Fisher Governor Co. He has 13 years' experience in the L. P. gas industry with Thermogas Co., where he was service supervisor.

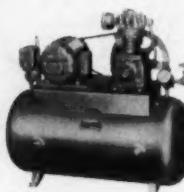
HARRY D. RUCH has been appointed product sales manager for Minneapolis Honeywell Regulator Co.'s newly-developed line of electric instrumentation. For 12 years previous to his present assignment, he was field sales engineer for the Philadelphia branch office.

JOHN B. KRIZER, formerly superintendent of refined products supply in Cities Service Oil Co.'s Supply & Distribution division, has been named assistant manager of that division. He joined the company in 1934.

HAROLD N. ROBINSON has joined Robershaw-Fulton Controls Co. as chief internal auditor.



THIS BOOKLET
TELLS YOU
HOW TO GET
AN EXTRA TANK
IN EVERY 20
ASK FOR
BROCHURE 483
IT'S FREE!



BRUNNER
BRUNNER DIVISION
DUNHAM-BUSH, INC.
WEST HARTFORD 10, CONNECTICUT

MICHIGAN CITY, INDIANA • MARSHALLTOWN, IOWA • RIVERSIDE, CAL.
heat-x BREWSTER, NEW YORK • TORONTO, CANADA • PORTSMOUTH, ENGLAND

DUNHAM-BUSH



**trainload?
carload?**

whatever your need
we want your order...
so **REACH,**
L.P.G. MAN

Ancor has the facilities to meet your need, whatever or wherever it is. And moreover, Anchor wants your order . . . wants you as a customer. They'll go out of their way to see that you are given every service humanly possible. Anchor's nation-wide facilities are of the most modern. Anchor men are skilled and experienced. There is one near you. So, reach, L.P.G. man, for that phone. Call Anchor in Tulsa, CHerry 2-7261.

ANCHOR
PETROLEUM COMPANY • TULSA

SALES OFFICES: Toledo, Shreveport, Hattiesburg,
Houston, Midland, Long Beach, Calgary



JOHN D. KARL has been named district sales representative for Caloric Appliance Corp.'s Minneapolis-St. Paul territory. He replaced TOM JOHNSON who recently was promoted to the position of assistant manager of the Mid West Sales division with headquarters in Des Moines, Iowa.

RICHARD M. NORTON has been appointed special assistant to the general sales manager for Raypak Co. to work with its manufacturers' representatives internationally. He spent the last 11 years with Day & Night Manufacturing Co.

DEAN OLDS is the new vice president in charge of production and engineering for Siegler Heater Co. He previously held the same position at David White Co., Milwaukee, Wis.

ROBERT B. ALLEN has rejoined Gas Equipment Co. as vice-president, sales. He was previously executive vice president of McNamar Boiler & Tank Co.

JOHN J. SOUKUP has joined the J. E. Lonergan Co., Philadelphia valve manufacturer, as a sales engineer.

Deaths

LAWRENCE W. ZONKER, one of the early pioneers in the L. P. gas carburetion industry, passed away April 24th in Los Angeles. He was 69. In 1936 Zonker established the company known as Butane Carburetor Service. He also established the trade name "Beam" during his early work on carburetion equipment. His son, Bob, one of the present owners of Beam Products Manufacturing Co., started manufacturing Beam products on a national scale in 1948. Zonker leaves his widow, a daughter, and three sons. His son, Tom, has been active with his father in the Butane Carburetor Service Co. and will continue the business.

SIDNEY W. HARVEY, president of Sid Harvey Inc., Valley Stream, L. I., New York, died suddenly on April 28 at the home of his daughter in Seattle, Wash. He was 61. Harvey founded the company in 1931 and was also chairman of the board of the 15 associated Sid Harvey Companies located along the eastern seaboard. He was a pioneer in the field of replacement parts for oil and gas burners on a wholesale basis. He is survived by his widow, two daughters and a son, Stephen R. Harvey, a vice president of the company, who will assume the positions formerly held by his father.

S. B. RYMER Sr., 79, founder and chairman of the board of Dixie Products Inc., died at his home in Cleveland, Tenn., April 14, following a four-month illness. He was a pioneer southern industrialist, establishing the Dixie Foundry Co., a manufacturer of cast-iron hollowware, in 1916. He became a leading manufacturer of wood and coal heaters and ranges and in 1928, began production and sale of gas ranges. He is survived by his widow, three daughters, and four sons.

ANDREW F. CASSIDY, national manager of marketing for Rheem Manufacturing Co., died suddenly of a heart attack on April 24. He was 43 years old. He is a past chairman of GAMA's gas water heater division and a member of the GAMA board of directors. He was a member of the AGA, the LPGA and the National L.P.-Gas Council. He is survived by his wife and one son.



AL LERT
SEZ:

CUSTOMER CONFIDENCE
goes a long way

SINCE I SWITCHED TO...

Superflame

• OVER 30 YEARS' MANUFACTURING EXPERIENCE
• THOUSANDS OF SATISFIED USERS
• EXCEPTIONAL DEALER SUPPORT PROGRAM

SMOKELESS—ODORLESS INCINERATOR
Extra capacity, heat resistant firebox, stainless steel burner, heavy 16 gauge combustion chamber, fiberglass insulation.



No. DR-75 Custom Deluxe model, automatic controls, "Fuel Saver", on-the-floor forced circulation, attractively finished, 70,000 BTU.



No. CGH-35—Circulator model, Modusnap control, "fan flame" burner, Pilotstat, "Fuel Saver", 35,000 BTU.

SEND FOR THIS KIT



QUEEN PRODUCTS DIVISION
KING-SEELEY CORPORATION
Albert Lea, Minnesota
Please send me the kit "SUPERFLAME
SUPERIORITY SELLS!"

NAME _____

ADDRESS _____

CITY & STATE _____

BPN-759

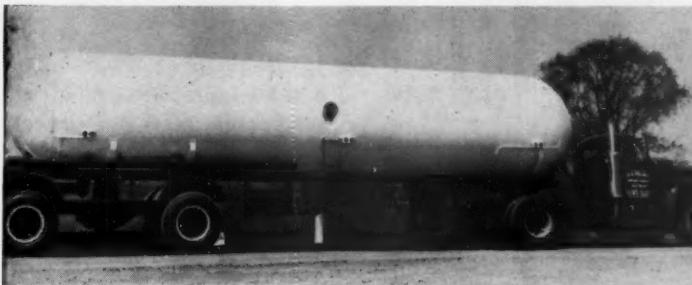
DEPT. LP-3

QUEEN PRODUCTS DIVISION, KING-SEELEY CORP., ALBERT LEA, MINN.

WHAT'S NEW

IN PRODUCTS AND TRADE LITERATURE

For further information on items reviewed in this section use the convenient post-paid Readers' Service Cards on pages 91, 92



Transport features design improvements

Circle 1 on Readers' Service Card

A pressurized over-the-road tank trailer for LPG incorporating what the maker calls many significant design advances is announced by American Car & Foundry division.

A sectional hemispheric head, hot-formed of three pieces, eliminates more than 60 per cent of the welding required in the conventional "orange peel" hemispherical head.

Safety relief valve, rotary gauge, fixed liquid level gauges, as well as the pressure gauge and thermometer well are installed in recessed openings.

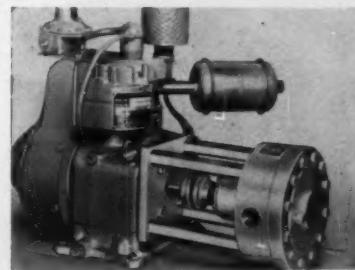
The bottom liquid outlet connection is designed with a flanged outlet and the spray filler connection is oversized, anticipating future availability of

higher capacity pumps.

All tanks are water-gauged and certified for accurate actual capacity (within three pints).

ACF-designed "Sigma" baffles are included as standard equipment. They combine maximum surge protection with light weight, easy accessibility and controlled stress levels at baffle attachment.

The ACF baffle is an adaptation of the design used in the ACF "king-size" tank cars. It breaks up the harmonic action rather than restricting it. The baffle assembly is a series of three light-pressed shapes mounted horizontally across the upper two-thirds of the tank by bolting them to T-1 steel ribs welded to the tank shell.



Pumps, in two sizes, available for L. P. gas operated engines

Circle 2 on Readers' Service Card

Smith Precision announces E-series pumps with Briggs & Stratton engines factory-equipped to burn L. P. gas. Engine package includes two regulators and a fuel filter, recoil starter, ignition shielding, spark-arrestor muffler, etc. Pump has built-in strainer and built-in 2-way bypass valve. Available in two sizes, 7 to 10 gpm and 12 to 15 gpm, and in two duty classifications, intermittent and continuous. It is intended for use on vapor, not on liquid.

New switch is rain-tight and explosion-proof

Circle 3 on Readers' Service Card

An enclosed switch which is rain-tight as well as explosion-proof has been introduced by Micro Switch. It features an aluminum die-cast housing and dome cover, designed for use on fuel-handling equipment and other applications. Underwriters' Laboratories lists it as being suitable for use in Class I (vapor-air mixtures), Groups C and D and Class



Vent-o-magic WALL HEATER

Patent Applied For

Dramatically different; Complete, Compact, Safe. Mounts on (not in) any outside wall. No chimney, no ductwork. Sealed exchanger; burnt gases cannot enter room. Expansive louvered panel frees maximum heat quickly; accents warm floors. Easy to install and service; all controls handy via front Service Door. Completely automatic; 100% Safety Shutoff. A.G.A. Approved. Beautifully finished in Coppertone & Cafe' baked enamel.

•BLOWER is optional; easy to add anytime. VENT is weatherproof, windproof, pestproof. Features Aluminized Steel construction.

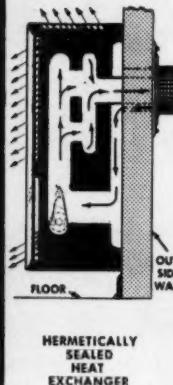
WRITE FOR THESE

- V-O-M SEALED WALL HEATERS, ask for Specs File No. 773.
- RECESSED WALL HEATERS, ask for Specs File No. 753.
- CATALOG NO. 59, for Consoles, Utility & Fireplace Heaters.

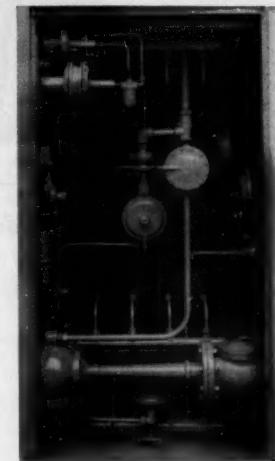
FOR NATURAL • MANUFACTURED • MIXED • LP-GASES

THE OHIO FOUNDRY & MFG. CO. "America's Finest Since 1846" STEUBENVILLE, OHIO

NO CHIMNEY!



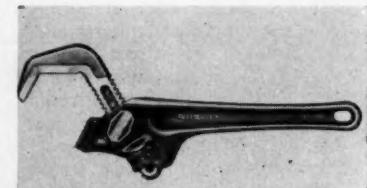
II (dust-air mixtures), Groups E, F, and G. Electrical capacity is UL-listed at 20 amps, 125, 250 or 460 vac. The switch, designated 2CX3, also is capable of undergoing a 100-hour salt fog test without injury to the actuating mechanism or precision-switching units.



ALGAS vaporizer-mixers get Factory Mutual approval

Circle 4 on Readers' Service Card

ALGAS announces Factory Mutual approval of its direct-fired combination L. P. gas vaporizer-mixers. Automatic control of the mixed gas production and heating value is maintained without depending on electric power. Turn down is 100 per cent. Several units will work together to produce total plant demand. The unit pictured will produce up to 10,000 SCFH of L. P. gas-air mixture at pressures up to 5 psig. Four other sizes of this model, ranging from 2500 to 50,000 SCFH mixed-gas capacity are available.



Hex wrench specially designed for tight quarters

Circle 5 on Readers' Service Card

The Ridgid No. E-110 hex wrench is specially designed for use on all nuts and fittings that are in tight quarters. Its easy-on, non-slip, multi-sided grip gives extra leverage on all hex nuts, square nuts, valve-packing nuts,

For further information on these products use Readers' Service Cards on pages 91, 92

unions, and gas cocks. It is said to eliminate rounded nut-shoulers and bruised knuckles. Jaws have maximum opening across flats of $2\frac{1}{8}$ in. and will handle up through $1\frac{1}{2}$ in. drain nuts.



**Portable fire extinguishers
stress simplified operation**

Circle 6 on Readers' Service Card

Two pressurized, dry-chemical, portable fire extinguishers, in $2\frac{1}{2}$ and 5-lb capacities, are announced by Walter Kidde. According to the manufacturer, the designs stress simplified operation for anyone. Simply aim the discharge nozzle at the base of the fire and push the actuating lever. There is no trigger locking pin to remove, no valve to turn, no inverting, and no bumping. Pressure gauges, recessed in the housing for added protection, tell at a glance if they are charged and ready for action. Their operating range of from 110 to 180 psi means that they can be easily and quickly recharged with air or nitrogen.



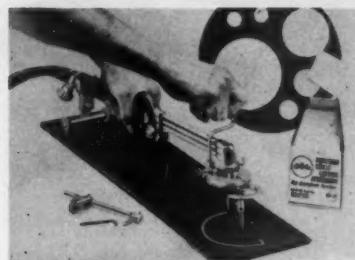
**Climate Center controls indoor
comfort, monitors weather**

Circle 7 on Readers' Service Card

The "Climate Center" by Carrier monitors outdoor weather and indoor conditions and regulates the operation of a year-round air-conditioning system. The three black dials are: an electric timer for automatic temperature adjustment, a barometer, an indoor ther-

mometer, and a hygrometer for measuring humidity. The thermometer indicates outside temperature, while the three switches on the upper left control heating and cooling, fan operation, and automatic night-time temperature setback. The center dial is for temperature adjustment. The opaque square houses four signal lights that warn if the filter is clogged, the pilot goes out, or of a number of other checks, if they must be made.

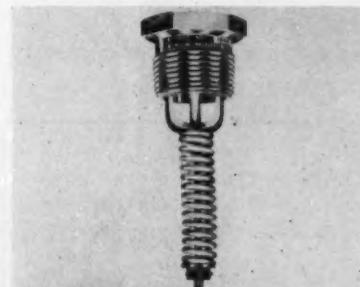
places the No. 7541 series. The new valve series has a 1 in. NPT inlet connection. The pipeaway adapter may be obtained with either a $\frac{3}{4}$ or 1 in. NPT outlet connection.



**Small cutting tool will
operate in confined spaces**

Circle 8 on Readers' Service Card

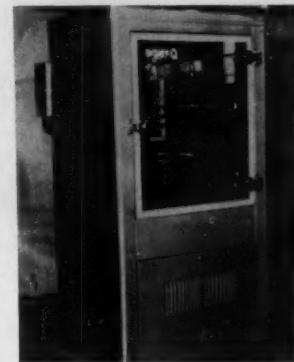
Ideas Inc.'s tool for cutting precision holes and various shapes in thick metal plate attaches to any acetylene or L. P. gas cutting torch. Squares, rectangles, odd-shaped holes, and solid figures can also be accurately formed for welding fabrication. Because of the tool's small size, it will operate in confined spaces.



**New safety relief valve
replaces two other valves**

Circle 9 on Readers' Service Card

Eastman-Blessing Co. announces a new safety relief valve especially for use on ASME motor fuel tanks. The outlet of the new No. 7544 series is machined to accept a separate pipeaway adapter. When the adapter is not used, the 7544 series replaces the No. 7540 series safety relief valve; and with the adapter in place, it re-



**Rotisserie cuts commercial
cooking time by 80 per cent**

Circle 10 on Readers' Service Card

An infra-red Hickory-Q rotisserie said to cut cooking time as much as 80 per cent is offered by Suburban Appliance. It incorporates a ceramic gas burner that cuts fuel costs as well. The unit can prepare up to 400 lb of meat a day. All basting is done automatically. It is sized for waist-high cooking and designed for use indoors or out. Dimensions are 24 in. deep, 30 in. wide and 57 in. high. The interior is finished in porcelain enamel with cooking apparatus of stainless steel.



**Arkla's Gaslites can be
made to "talk"**

Circle 11 on Readers' Service Card

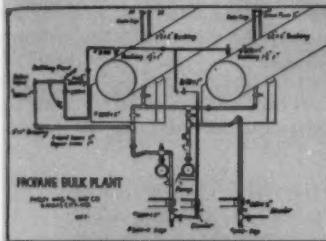
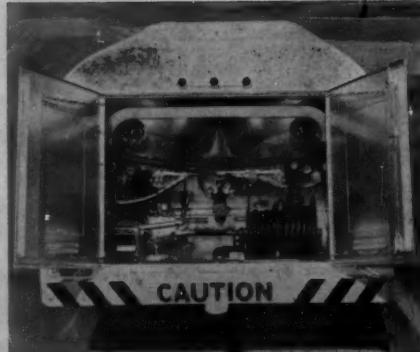
Arkla has developed a remote loudspeaker attachment for special use with its Gaslites. It consists of two speakers mounted on a Gaslite post just under the lamp case and can be easily wired into

**Your One Supplier with everything in L.P. gas
and Anhydrous Ammonia Equipment**



"The Loadmaster" LPG Truck Tank

PASLEY-DESIGNED Truck Tanks (see above and right) were first to feature all controls from one location. **All operation is from one point—rear compartment.**



BULK PLANTS Pasley LPG and Ammonia type installations—a turnkey job or engineering for your own installation. Write, wire or call.

Also a complete line of accessory equipment.

"Pastels By Pasley"

Blush Peach Smoky Grey
Sunshine Yellow Seafoam Blue
Mustard Lime Wedgewood Green
Eureka Orchid Rose Beige
Lake Blue Desert Rose

COLOR — The Modern Trend! Bring your LPG Equipment up to date. Available in the following colors . . . (write for information)

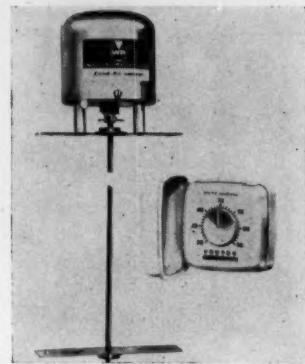


"EVERYTHING IN L.P.G. AND ANHYDROUS AMMONIA"

The Pasley Mfg. & Dist. Co.

501 East 11th Street • Kansas City, Mo. • Tel. Victor 2-2369

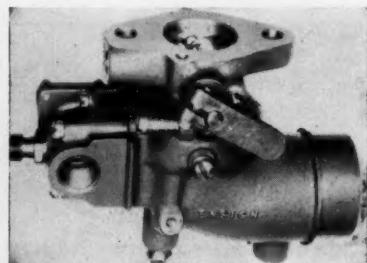
any radio, phonograph, hi-fi or loudspeaker system. Another application is in conjunction with public address systems in commercial establishments, where it can be utilized for paging guests. It is available as optional equipment for new or existing Gaslite installations.



**Zone control package
for forced-air systems**

Circle 12 on Readers' Service Card

White - Rodgers recently announced development of a combination control package for zoning forced-air heating-cooling systems. Called Zone-Air, the unit can be installed anywhere on the ductwork of both new and existing systems. In use, one package is used to zone each specific area of a building. Each package is composed of a low-voltage "Fashion" thermostat and silent automatic damper motor. Where required, an "Equalizer" damper is available to stabilize air velocities in relation to the number of zones in operation.



**Carburetor requires
no priming or choking**

Circle 13 on Readers' Service Card

Ensign's carburetor requires no priming or choking and is ideal for small engines. It is used with the Ensign Model "RW" liquid vaporizer or the "VP" two-stage vapor system. Idle fuel lines are

More sales and profits

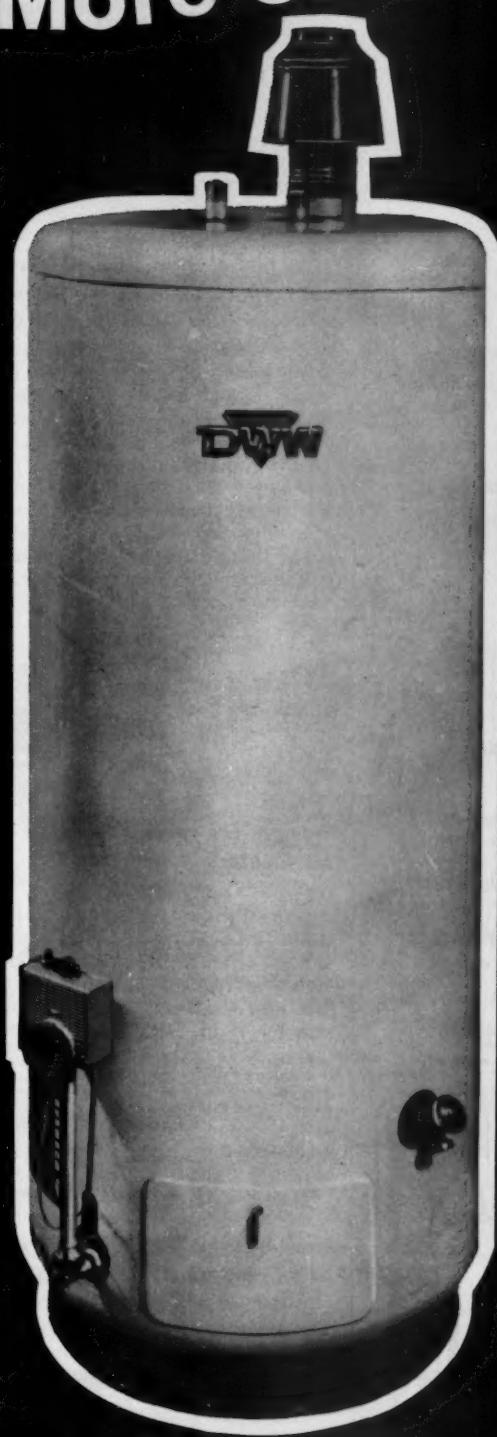
because



gives you
competitive prices
and quality
automatic

gas
water
heaters

nationally
advertised



liberal
10-year
guarantee

Especially
Designed for
LP GAS



D.W. WHITEHEAD MFG. CORP.

145 EAST STATE STREET TRENTON, N. J.

NEW! RUGGED! ECONOMICAL!



Model EC-H LP-Gas Pump,

**15 GPM with vapor line
12 GPM without vapor line
at 75 P.S.I. differential**

Fills Small Tanks As Fast As Larger Pumps.

For installations requiring larger capacity than our 10 GPM EC-1 & EG-1 models.

Rugged construction and faster delivery make the new EC-H pump ideal for small operations where speed and economy are necessary.

The new units are supplied with 1½ HP single-phase explosion-proof motors which have cooling fans and are capable of at least 2 hours continuous running if necessary.

Here are the built-in savings you get with EC-H pumps:

- ★ Lower cost than competitive units having equal capacity against differential pressure.
- ★ Super-hard gears.
- ★ Built-in 2-Way bypass valve.
- ★ Patented mechanical shaft seal.
- ★ Built-in strainer.
- ★ Superior Smith construction, much less noise than larger pumps.
- ★ Motor has built-in switch and overload protection.
- ★ Easy to install due to built-in features.

Write:



MUrray 2-2293 and MUrray 2-2691

Southeastern Distributor: **Pond-Johnston Inc.** Warehouses in Mobile, Ala.; Jacksonville, Fla.; Jackson, Miss.
Western States Distributor: **Tesco Products, Inc.**, 3920 West Burbank Blvd., Burbank, California.

GENERAL L-P GAS TANKS

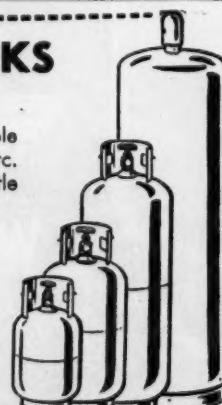
20 lb.—40 lb.—60 lb.—100 lb. Cylinders

Complete Line of Accessories for Single or Double Hook-ups . . . Regulators—Valves—Racks—etc. Everything that is needed for complete Bottle Gas Installation.

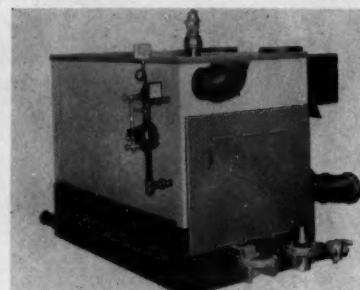
★ Send for full details today.

General Processing Corporation
Main Office and Factory: Quincy, Michigan

West Coast Division:
10854 E. Central Ave., El Monte, California



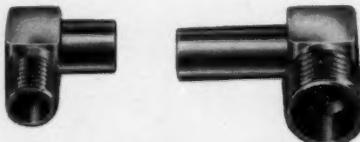
eliminated and absence of choke parts makes possible a lower carburetor price. The unit is made to fit $\frac{3}{4}$ and 1 in. SAE manifold flanges.



Less installation time, lower cost, features of boiler jacket

Circle 14 on Readers' Service Card

The Series "150" large industrial gas-fired boiler has a new jacket known as the utility jacket. Features include less installation time and lower cost. Jacket can also be installed after boiler is completely assembled, including the piping and breeching assembly. Peerless "150" is manufactured in 33 sizes, rated from 600,000 to 5,400,000 Btu input, for use with all types of gases.



Gann offers special fittings for Century converters

Circle 15 on Readers' Service Card

Gann Products offers special fittings for Century H and HV converters and 2000 Series carburetion: $\frac{5}{8}$ in. hose size by $\frac{3}{4}$ in. NPT for the converter; $\frac{5}{8}$ in. hose size by $\frac{3}{8}$ in. NPT at carburetor.



New signal switch may operate as an emergency warning signal

Circle 16 on Readers' Service Card

Betts Machine announces its A-2 turn signal switch for trucks. It is designed to operate all four directional lamps simultaneously as emergency-warning signals. This is accomplished by raising



NEW!
CASH IN ON COLOR
BACKGUARDS!!

6 CHANGES for Every *Enterprise* Styleline Range Off-n-On in Minutes

Only *ENTERPRISE* offers this quick-changing backguard insert! In just a few moments, you can show customers one range with 6 different backguards—in their choice of Decoram colors. Every *Enterprise* Styleline Gas Range you stock means 6 choices for your customers!

In just minutes, you can change backguard inserts in smart colors designed to match kitchens and electric appliances.

Coral Pink
Turquoise Green

Canary Yellow
Midnite Black

Chinese Red
Cocoa Brown

Backguard inserts are interchangeable on all 36" and 30" *Enterprise* Styleline Gas Ranges. This is a great, sure-to-sell feature to appeal to every housewife! Order now and start pulling in profits!

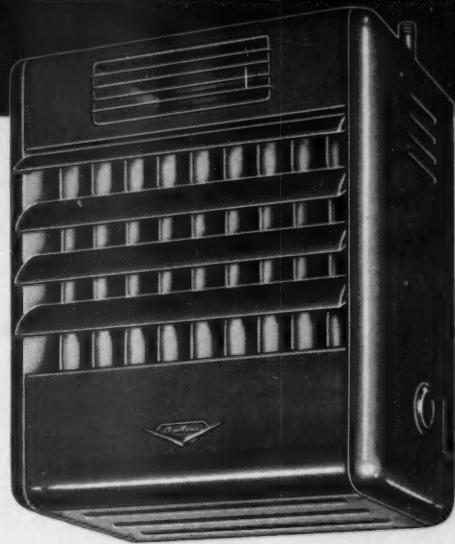
Let Our *Enterpris-ing* Salesman Show You

PHILLIPS & BUTTORFF CORPORATION

NASHVILLE, TENNESSEE

IN OUR 100th YEAR

PERFORMANCE



Peerless GAS UNIT HEATERS

Most Advanced Heater on the Market

Peerless delivers you all the performance you need to profitably sell gas unit heaters. These quality unit heaters are expertly engineered to provide maximum performance with both low initial and operating costs. Peerless includes features that afford peak efficiency—aluminized steel heat exchanger, live rubber motor mounting, our own foundry-produced cast iron burners, scientifically designed louvers for best heat direction, motors especially manufactured for unit heater application, and a high-quality steel jacket hand-somely finished in modern gray-green.

A complete line of Peerless unit heaters is available for any type requirement—fan and centrifugal blower types from 25,000 to 200,000 B.t.u. All Peerless heaters fully meet the requirements for the American Gas Association and can be used for natural, liquefied, petroleum, mixed or manufactured gases.

Good unit performance means profits—to you. You'll get it with Peerless.

Get the full Peerless performance story. Write, wire, or phone for specifications and prices.

GAS | *The modern fuel*
Peerless | THE MODERN HEATER

PEERLESS MANUFACTURING DIVISION

OF DOVER CORPORATION

LOUISVILLE 10, KENTUCKY

a. Sentry
 b. Watchman
 c. Cabildo
 d. Imperial
 e. Flair
 f. Riviera
 g. Heritage

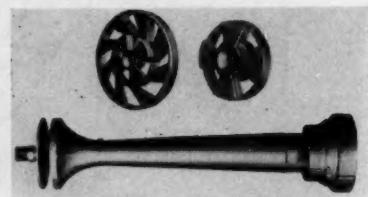
Gaslites BY ARKLA

A superb line of traditional and contemporary gas lighting fixtures... reflecting the nostalgic charm of America's gaslight era and designed to lend graciousness to outdoor illumination.

Gaslites by Arkla... picturesque and practical... a mark of the owner's taste for beauty.

For full specifications and prices, please write Arkla • Gaslite Division Shannon Building Little Rock, Arkansas

the operating handle and shoving it forward into a notch. This feature is self-canceling when the handle is returned to either the off position or to right or left-hand turn. Two red-flashing pilot lights indicate which signals are working.



"Swirl" grid produces high efficiency in burner

Circle 17 on Readers' Service Card

Ransome's "Swirl" burners produce high efficiencies by a patented "Swirl" grid that sends out a series of jet streams of gas-air mixture from the orifice. As the velocity of the swirling jet stream is increased, more secondary air is drawn into the gas stream where it instantly mixes with the gas and hastens the rate of combustion. The port area is adjustable by means of a rotating disc.

ONLY

SUBURBAN Nōvent and DYNAVENT GAS HEATERS INSTALL...

Automatic with Built-in or Wall Thermostat—
 Burn no room air
 Forced air circulation—Even heat floor to ceiling

SAVE UP TO 30% IN FUEL COSTS

Available in three sizes—
 20,000 BTU—35,000 BTU—
 45,000 BTU. Fully approved by AGA, Leading Utilities and LP-Gas Marketers. For complete details, write to DEPT BP 759.

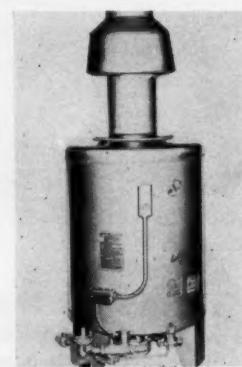
Suburban APPLIANCE CO.

General Offices: P. O. Box 551, Morristown, N. J.
 Factory Dayton, Tenn.

IN WINDOWS

IN WALLS

POWER VENTED—NEED NO FLUE OR CHIMNEY



Burkay heater adaptable to a variety of uses

Circle 18 on Readers' Service Card

Burkay 668 gas-fired water heater has been added by A. O. Smith to its commercial line. It has an input of 300,000 Btu per hr. Fully approved for 180 deg. service, it provides recovery rate of 288 gal. an hr at 100 deg. rise. In restaurants it may be installed as a straight recovery heater, a booster heater or part of a Burkay Booster Recovery or Shure-Temp Booster Recovery system. It is also available as a swimming pool heater with self-generating controls and flow switch.

FOR MORE INFORMATION

about New Products in this Issue

Each New Product or Trade Literature item reviewed in this issue is numbered. Circle the corresponding numbers on the Readers' Service Card; then PRINT your name, title, company and address plainly and drop the card in the mails (no postage is needed).

USE THESE
POSTAGE FREE
POST CARDS

FIRST CLASS
PERMIT NO. 36
New York, N. Y.

BUSINESS REPLY CARD
No postage necessary if mailed in the United States

POSTAGE WILL BE PAID BY

BUTANE-PROPANE News
Readers' Service Dept.

P. O. BOX 106

VILLAGE STATION
NEW YORK 14, N. Y.

Circle the
number of the
item requested

BUTANE-PROPANE News READERS' SERVICE DEPARTMENT

Please send me further information
about the items circled below

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63

• Please Print

NAME _____

TITLE _____

COMPANY _____

ADDRESS _____

CITY & STATE _____

July, 1959 • Void after 90 days

BUTANE-PROPANE News READERS' SERVICE DEPARTMENT

Please send me further information
about the items circled below

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63

• Please Print

NAME _____

TITLE _____

COMPANY _____

ADDRESS _____

CITY & STATE _____

July, 1959 • Void after 90 days

FIRST CLASS
PERMIT NO. 36
New York, N. Y.

BUSINESS REPLY CARD
No postage necessary if mailed in the United States

POSTAGE WILL BE PAID BY

BUTANE-PROPANE Readers' Service Dept.
News

P. O. BOX 106
VILLAGE STATION
NEW YORK 14, N. Y.

FIRST CLASS
PERMIT NO. 36
New York, N. Y.

BUSINESS REPLY CARD
No postage necessary if mailed in the United States

POSTAGE WILL BE PAID BY

BUTANE-PROPANE Readers' Service Dept.
News

P. O. BOX 106
VILLAGE STATION
NEW YORK 14, N. Y.

FOR MORE INFORMATION

about New Products in this Issue

Each New Product or Trade Literature item reviewed in this issue is numbered. Circle the corresponding numbers on the Readers' Service Card; then PRINT your name, title, company and address plainly and drop the card in the mails (no postage is needed).

BUTANE-PROPANE READERS' *News* SERVICE DEPARTMENT

Please send me further information
about the items circled below

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56
57	58	59	60	61	62	63

• Please Print

NAME _____

TITLE _____

COMPANY _____

ADDRESS _____

CITY & STATE _____

July, 1959 • Void after 90 days

USE THESE
POSTAGE FREE
POST CARDS

Circle the
number of the
item requested



Control for use on deluxe and larger size water heaters

Circle 19 on Readers' Service Card

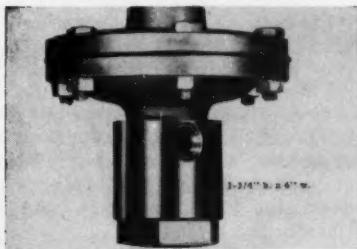
The Unitrol 400R gas water heater control, available from Grayson Controls, features a slip-top cover and flip-top lid, built-in pressure regulator, and universal pilot gas filter. Designed for use on deluxe and larger size water heaters, it can be used on units with a burning rate as high as 100,000 Btu per hr.



Ventilation with minimum amount of air movement

Circle 20 on Readers' Service Card

Keating exhaust systems remove 900 cu ft of air per minute per linear foot and completely remove all of the cooking odors. They are available for any size or type of equipment.



Block and vent valve offered in miniature $\frac{1}{4}$ in. size

Circle 21 on Readers' Service Card

George W. Dahl Co. offers a miniature $\frac{1}{4}$ in. block and vent valve. Air flow is straight through at operator pressures of 5.5 psi or greater. As the operator pressure drops to 3.5 psi, air service is

blocked, and when it reaches 2 psi or less, the cavity between the blocked ports is vented to atmosphere.

Complete system may be leased from LPG Leasing Corp.

Circle 22 on Readers' Service Card

LPG Leasing Corp. announces a new program. For \$6.95 a dealer can lease the complete system consisting of two 100 lb ICC cylinders, two 21001 cylinder valves, one 551 L. P. gem regulator, one 27004 tee check manifold and two

780 pigtails. All new equipment and warranty-protected, it is ready to install.

Counter griddle features two-zone heating

Circle 23 on Readers' Service Card

Frymaster's "Jet" counter griddle features two-zone (left-right) heating. It has an 18 in. x 36 in. x 1 in.-thick griddle and full flame burners. Oversized manifolds give constant gas pressure and a 100 per cent safety pilot protects against flame out. High splash



THE ROCHESTER *Criterion* GAUGE IS
easy to read - accurately!

Criterion's exclusive angle-view dial makes reading easy from any angle. Big, bold, black printing on white background insures maximum ease in readability.

Demand Rochester Criterion gauges on your next tank order or order direct from factory.



ROCHESTER GAUGES, INC.
OF TEXAS

2425 CAROLINE • DALLAS, TEXAS

SALES OFFICES: DALLAS; ATLANTA; DENVER; CLEVELAND; ROCHESTER;
PHILADELPHIA; SAN FRANCISCO; LONDON, ONTARIO

ALL FINE PRODUCTS

NOW!

FISHER
TWO-STAGE
REGULATOR
SYSTEM

PACKAGED COMPLETE IN ONE
EASILY STORED CONTAINER

1. 1/4" Plastall
2. First Stage Regulator
3. Second Stage Regulator

These new, easily stored packages provide everything needed for each installation. Keeps regulators safe from weather, tampering and theft. Helps inventory control. Two-stage regulation assures trouble-free installation, better pressure and savings on tubing and service costs.

Write for Prices and
Descriptive Literature

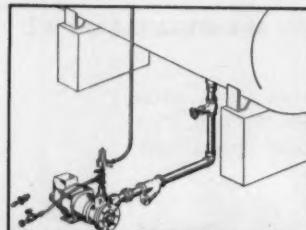
LP GAS HOSE



Highest quality Hose with factory attached couplings (Reusable couplings available). Perforated synthetic covers. Ground wire tested. Guaranteed to exceed requirements of pamphlet 58.1D sizes from 1/4" to 3".

Standard lengths and sizes
available for immediate shipment

LIQUID PUMP ASSEMBLIES



Complete assemblies of all parts required for lift truck or trailer park filling. Save time, easy to install. All assemblies include Corken Coro-Flo Pumps, noted for high efficiency, safety and long life.

Write for Fine LP Catalog

FINE PRODUCTS CO.
6240 OGDEN AVE.
BERWYN (Chicago Sub.) ILLINOIS

guards, oversized grease trough, and gallon-sized grease drawer are also featured.



Gas lamps available with colored finishes

Circle 24 on Readers' Service Card

Falcon's "Gas Lamps" are now available in colored finishes. The lamp finish may be in bronze, traditional copper-tone, white, or black, which has been standard. Posts or wall brackets are available in matching colors. All finishes are bonderized and phosphated to give them life-time durability.

ARMSTRONG GAS HEATER



Model 7150 is fully vented—AGA approved for Natural-Mixed, Manufactured and L.P. Gases. It has 100% gas tight exchangers that provide clean, dry heat, eliminating sweating windows and walls. Body is porcelain enameled, finished in Armstrong's new color "Mocha-tone" which retains original color for years. 15,000 B.T.U. 16 1/4" wide, 16" deep, 21 1/4" high.

Model 7200—same as above but 20,000 B.T.U. and 19 1/4" wide.

Write for Literature and Price
List on Armstrong's Complete
Line of 60 Models and Sizes to
60,000 B.T.U.

Armstrong Products Corp.
Dept. BP, Huntington 12, W. Va.

TRADE LITERATURE

Critical flow prover and dry test meters bulletins.

Circle 25 on Readers' Service Card

Bulletin 500, "American Dry Test Meters," has just been published by American Meter. It provides information on a variety of meters including tinned steelcase with totalizing indexes and the charcoal test, tinned steelcase with hourly-rate dial, and ironcase and aluminumcase with totalizing indexes. Another bulletin "American Critical Flow Prover—maximum working pressure 1000 psi" has also been published.

Spray nozzle information

Circle 26 on Readers' Service Card

Bulletin 6A-622-1, by Schutte & Koerting, describes the company's line of nozzles for spraying liquids in medium-to-large quantities. It contains information on capacities, sizes, dimensions, and materials of construction, plus a photo showing the liquid spray distribution of a nozzle during operating procedure.

Small valves brochure

Circle 27 on Readers' Service Card

Section N of steel catalog KS-1 has been released by Kerotest. It is a four-page brochure covering the company's line of small valves for general application. Working pressures, specifications, construction features, and suggested applications are included.

"Promote Your Business" book

Circle 28 on Readers' Service Card

"Promote Your Business," a booklet covering advertising and sales promotion for distributors and dealers, is released by Cities Service. Planning the advertising and promotional program, choosing media, setting and carrying out budgets, and getting ideas for advertising programs are contained in the book.

Torch, furnace, cylinder data

Circle 29 on Readers' Service Card

Goss Gas Inc.'s catalog lists its complete line of L.P. gas torches, melting furnaces, cylinders, and accessories. Each item is pictured and complete specifications are given.



Effective school range plan can assure future market

• Adapted from a talk presented by Robert E. Leitch, vice president of the Bottled Gas Corp. of Virginia, before the marketers meeting at the LPGA convention, May 6.

ADVERTISERS are learning a high percentage of teenagers are only a few steps from the altar. The median age of engagement is just over 17. Most popular age for marriage is 18. Over 500,000 brides each year are teenagers. One out of every three 18-to-19 year-old girls is a housewife!"

This quotation, from the February 1958 issue of "Changing Times," points the way to a big market which we have been overlooking. The way to assure this market is by having an effective school range program. We have always felt that a program of this kind would be in effect a matter of "sowing for the future." But the statistics quoted show that this future is not as far off as we might think.

I am convinced that the electric industry, even though it has had a school range program for years, has failed to do an effective job; and if we step in and do the job, we will be hitting one of the soft spots in that industry's armor.

My company has already begun to demonstrate the possibilities of such an attack. Over the past seven or eight years we have conducted school programs on a hit-or-miss basis; and even though these programs were not properly organized, we sold dozens of gas ranges as a direct result. Our salesmen in one area where we had such an activity tell us that they regularly encounter young housewives who say they became sold on gas after learning how to cook on it in the school kitchen.

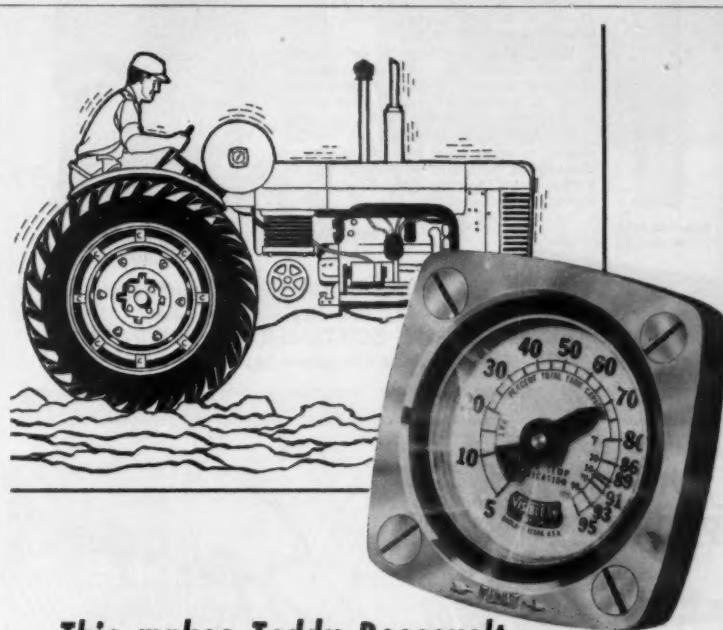
During this past school year we have gone about our school program in earnest. We learned from

experience that one of the reasons we hadn't been getting ranges into more home economics kitchens was because we were trying to sell them to the school. Our electric competition has for a number of years put these appliances in for nothing.

Faced with this fact, we embarked on a *consignment* program. During this past year we have installed approximately 27 ranges in a total of 18 schools (quite a number have two home economics kitchens).

Just the beginning

This is really just the beginning of this program for our company. There are, conservatively, an average of 150 girls taking home economics in each of these schools. If you multiply this figure by the



This makes Teddy Roosevelt look like a piker! . . .

Teddy himself couldn't hold a candle to this modern-day rough rider! Day after day, this Visible gauge rides over the roughest terrain from its position of authority on your tractor's fuel tank. There's never a bump too hard, never a condition too difficult to alter the dependable accuracy of the Taylor Visible gauge.

Visible gauges give accurate, dependable performance to hundreds of others, too . . . truckers and housewives, farmers and poultrymen the world over. They know they can trust Visible, because Visible's consistent performance and durability have made it the largest-selling LPG and NH₃ float gauge in the world . . . the "Standard of the Industry."

SQUIBB  **TAYLOR**
INCORPORATED

1213 SOUTH AKARD • DALLAS

Elgin's NEW Model 50
Fully Automatic Water Conditioner

A NATURAL FOR YOUR MARKET

For soft, rust-free, filtered water —

Automatically!

A complete city and well water conditioner, Elgin's new Cabinet Model 50 softens water, removes rust and filters for sparkling clarity in one automatic operation.

The Model 50 is easy to install and requires minimum maintenance and salt attention. A "most wanted" appliance, easily sold on its looks and performance in city and rural areas alike, it is a natural tie-in with home improvement plans.

Elgin also produces a sales-mate for the Model 50—the economical, semi-automatic Model 60 tank-type unit. A 3-year guarantee, plus a 10-year warranty, is furnished on both units. And Elgin provides you—the dealer—with sales stimulating merchandising aids and demonstrators to make your selling job easier and more professional.



Semi-Automatic Model 60



Fully Automatic Model 50

Write for Full Resale Facts TODAY!

Home Appliance Division

ELGIN SOFTENER CORPORATION

243 N. Grove St., Elgin, Illinois

for leakproof,
pressure-tight
connections

use
TiteSeal

SEALING
COMPOUNDS

Heat and vibration-proof, non-solvent, will not shrink, crack or crumble. Makes all assemblies leak-proof and pressure-tight. Prevents rust, corrosion, joint seizure.



LIQUID WRENCH

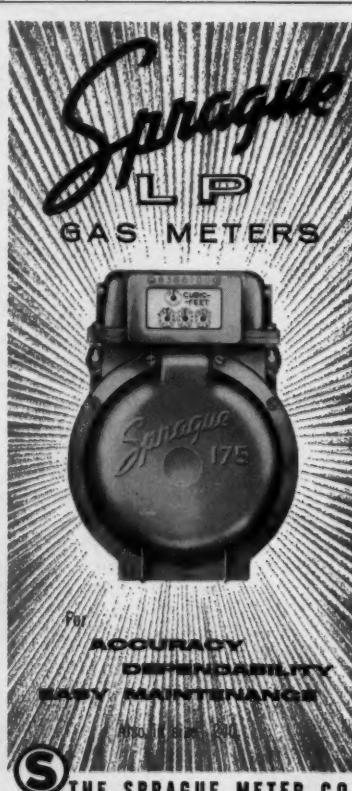
The super-penetrating
rust solvent

LOOSENS
rusted bolts, nuts,
screws, 'frozen' parts

Liquid Wrench works
fast... yet is absolutely
safe for all metals and
alloys.

At Industrial, Automotive,
Hardware, Plumbing Jobbers

RADIATOR SPECIALTY CO.
Charlotte, North Carolina



S THE SPRAGUE METER CO.

35 SOUTH AVE. • BRIDGEPORT 1, CONN.

Effective school range
program • Continued

number of schools (18) you will see that we are telling our story and educating in excess of 2700 future homemakers in the use and superiority of gas. Think what an impact the gas industry could make on the cooking habits of this Country if this program was copied by all L. P. gas companies throughout the 50 states!

Specifically, this is our program:

1. A top-model range is consigned before the school year starts.

2. This range is replaced at the conclusion of the school year with another new range with all the latest features. (Incidentally, the electric industry has failed to do this, and this has been one of the real weaknesses in its program. We have come across numerous instances where electric ranges have been allowed to stay in schools, without being exchanged for later models, for four or five years.)

3. All ranges are demonstrated soon after the beginning of the school year. Without this follow-up demonstration the school range program will fail! I have seen examples of where ranges have been installed and not demonstrated. They were not used because the teacher and the pupils were not familiar with them!

4. When the new range is installed at the beginning of the school year we always make a point of telling the teacher that it will be available for sale at the conclusion of the school year at a greatly reduced price. We had several requests this year from teachers for the range in their particular school, and we have made a practice of giving them the first refusal. If the teacher does not want it, she will usually help dispose of it through the families of class members on a first-come-first-served basis.

Students are attentive to men

In my opinion, one of the reasons why our demonstrations

have been so effective is that our own salesmen conduct them. Our sales manager and one or two other men in our sales force have been specially trained in putting on these demonstrations, and I think they do an extremely capable job. You know, people expect women to be good cooks, but there is something fascinating about a man cooking. I believe, also, that students are much more attentive to a man demonstrating than to a woman.

In the demonstration, we give the students as much as we can during the class period, and particularly stress their participation. We hit hard on the controlled temperature top burner, and they are fascinated by it—we let them cook on it during the last part of the period. We give them a lecture on L. P. gas, in general, and its many other uses, and you would be surprised at the interest shown and the intelligent questions asked.

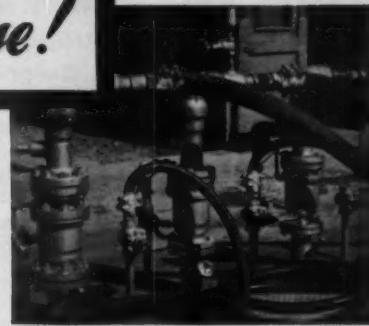
Revisit the teachers

We make a point of going back and revisiting the home economics teacher a few days after our demonstration to see that everything is all right. Invariably we are told that the girls, following a demonstration, will want to use the gas range every day in their classroom work.

None of the schools that are now using our range consignment program previously had a gas range in their home economics kitchen! Forty per cent of these schools had two electric ranges and the other 60 per cent had one electric range in the classrooms. I am happy to report that since our program started, this picture has changed considerably, and we have actually replaced a large number of these electric ranges. We have had several concrete examples of the effectiveness of the program in reports from teachers who state that where an electric range and a gas range are both available, the pupils are using the



**Strongest, Safest
Connections...for
All L-P Hose!**



"G J-BOSS" STYLE X-34 GROUND JOINT FEMALE COUPLINGS

Unequalled in strength, durability and safety! That's why more and more "GJ-Boss" Couplings are being used on hose handling L-P Gas . . . at bulk plants . . . on carloading rigs . . . and other installations. All parts are steel or malleable iron, thoroughly rust-proofed. Furnished with super-strong "Boss" Offset and Interlocking Clamps. Ground-joint union between stem and spud forms leakproof, trouble-free seal. Sizes $\frac{1}{4}$ " to 6", inclusive. Also available in washer type, and with companion "Boss" Male Couplings. Stocked by Manufacturers and Distributors of Industrial Rubber Products.

DIXON Valve & Coupling Co.

GENERAL OFFICES & FACTORY PHILADELPHIA 22, PA. BRANCHES—CHICAGO
BIRMINGHAM • LOS ANGELES • HOUSTON • DIXON VALVE & COUPLING CO., LTD., TORONTO
ASSOCIATE COMPANIES—BUCK IRON COMPANY INC., QUARRYVILLE, PA. • PRECISION DRAWN STEEL COMPANY, CAMDEN, N.J.

Keep Up with L. P. gas
Developments Each Month

by subscribing to

198 SOUTH ALVARADO STREET, LOS ANGELES 57, CALIFORNIA

**BUTANE-PROPANE
News**

Check herewith Bill me 1 year \$2.00 2 years \$3.00

Name Title

Firm

Street

City Zone State

NOTHING heats like...
is more modern than...
is more economical than...
gas

BUZZER
REG. U.S. PAT. OFFICE
JUST CONNECT TO GAS SUPPLY

**INDUSTRIAL GAS
BURNERS & FURNACES**
Using Only Low Pressure Gas
for Clean, Fast, Quiet Heat-Up at Lowest Cost!

PIPE BURNERS for even heat distribution in any capacity.

NOZZLE BURNERS for all capacities up to 1 1/4 million BTU's.

RING BURNERS for all capacities up to 500,000 BTU's.

BENCH TYPE OVEN FURNACES for heat treating and pre-heating. Temperatures to 2000° F.

CHARLES A. HONES, INC.
133 So. Grand Avenue, Baldwin, L.I., New York • BALdwin 3-1110
"BUZZER" Burners & Furnaces for Heat Treating, Melting, Soldering

Est. 1911

Write today for complete "BUZZER" CATALOG

PARACOIL

LP-GAS VAPORIZERS

Specified by Consulting Engineers throughout industry. Units are applicable to ammonia vaporization as well.

WRITE FOR BULLETIN 130

DAVIS ENGINEERING
(A Division of American Metal Products Company)
520 Main Avenue, Wallington, N.J.

Improved WEED CONTROL BURNERS!

- BLUE JET (Vapor)**
Most economical burners yet! Throw flame 8 to 12 feet. Burn up to 30 gals. an hour. "Blow-out-proof" pilot.
- #7**—Over 7' long; light weight; lever-operated valve; two hooded orifice nozzles.
- #5**—6' long; same as #7 except single hooded orifice nozzle.
- #3**—3' long—otherwise same as #5.
- RED JET (Liquid)**
For farm, commercial and industrial use. Unconditional 2-year guarantee.
- #30 and 30A**—lightest and most durable liquid burner made. Runs on liquid, liquid & vapor, or straight vapor.

Distributors wanted in some areas.

Northwest Fabricators, Inc.
NYSSA, OREGON

Effective school range program • Continued

gas range almost exclusively. I emphasize again that this is because we have taught these girls to use our product.

Many benefits

The management of our company feels that we will benefit in many ways from our program:

1. We are creating a large number of gas users for the future.
2. Through our contacts with the school administration we are creating good will, which very often results in the securing of additional school gas loads.
3. The home economics students are taught that there are many other uses for gas. They take this information home to their parents.
4. In many cases we have found the home economics teacher to be one of our staunchest boosters.

5. Comparatively speaking this is a very inexpensive form of advertising. Our investment is limited to our inventory cost. We recover the cost of our range, plus installation expenses, each year through resale. We pay no commission on these resales we insist that our managers personally handle the details of this phase of the program.

Potential is tremendous

I feel that our industry will be missing a terrific opportunity if we do not go to work on this unlimited source of prospects. The potential is tremendous! Our competition has not done a good job in this field because they are not equipped to do it. Oh, there are giants among the electric appliance manufacturers. But in the rural areas, particularly, they must still rely on the small dealers. These men do not have the training or the manpower to do the job we can do. Very few have done the aggressive outside selling job that we have known we had to do.

Here's a market development plan that will pay off quickly. Let's get on the bandwagon. ■



Butane, Propane POWER

CARBURETION • INSTALLATION
• SERVICING



The city that went LPG

Dramatizing the dynamic versatility of LPG, the Philgas-powered squad car above indicates how completely Dyersburg, Tenn., converted its municipal vehicles to LPG. For the story behind this significant change, turn the page.



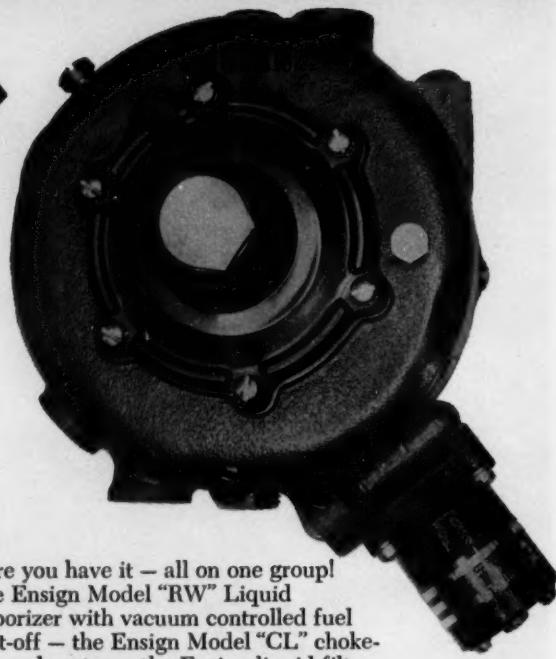
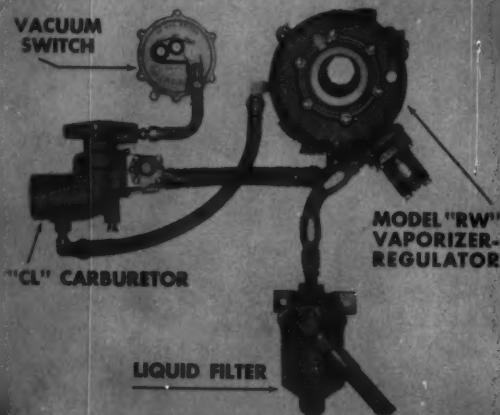
Look!

NOW YOU CAN
REALLY GO TO TOWN
WITH **ENSIGN'S** "Years ahead"

LP-GAS CARBURETION

FOR LIFT TRUCKS AND SMALL TRACTORS

THE NEW MODEL "RW"
VAPORIZER-REGULATOR
WITH VACUUM CONTROLLED
SOLENOID FUEL SHUT-OFF.



Here you have it — all on one group! The Ensign Model "RW" Liquid Vaporizer with vacuum controlled fuel shut-off — the Ensign Model "CL" chokeless carburetor — the Ensign liquid filter and Ensign Model "SF" vacuum switch!

There's no equal! For lift trucks, small tractors, and power units, these Ensign components represent the most highly developed LP-Gas carburetion system ever built. With these components in your stock you can handle about 75% of all LP-Gas carburetion requirements — and at considerably lower installation cost.

Easy to start without choking and priming. Powerful — economical performance. Automatic fuel shut-off plus the highly efficient Ensign filter. Fewer connecting lines make for easier installation. Readily connected up with dealer's stock fittings.

Yes, now you can really go to town with Ensign's "Years ahead" carburetion. Get all the facts! Simply request data on the Ensign Model "RW" Vaporizer-Regulator and you'll receive the whole story. Write today for data and prices.

ENSIGN

CARBURETOR COMPANY

1291 E. Orangethorpe, Fullerton, California

Branch Factory: 2330 W. 58th Street

Chicago, Illinois

DEALER INQUIRIES INVITED



This view of Dyersburg's municipal garage shows the variety of LPG-converted equipment (left to right): road-grader, sweeper, dump trucks, and garbage truck.

Why Dyersburg converted to LPG

Old stuff to the L.P. gas industry are the numerous advantages and benefits of LPG as a fuel for internal combustion engines. To the general public, however, LPG is virtually unknown as an on-the-streets fuel.

It came as surprising—but welcome—news, then, when it was recently announced (June BPN) that the city of Dyersburg, Tenn., had converted its entire fleet of municipal vehicles and equipment to LPG.

What prompted the city's action? To Dyersburg went BPN correspondent Emmett Maum. Here is his on-the-scene report.

LOCATED on one of the nation's main north-south arteries (U. S. Hwy. 51), 78 miles north of Memphis, is the growing city of Dyersburg. Highway travelers are immediately informed of Dyersburg's progressive pace. A large Chamber of Commerce billboard at the city's edge not only announces the population (12,621) but also assures the visitor he'll like Dyersburg and extends an invitation to industry.

That its progressive approach is more than just billboard psychology was conclusively demonstrated by the way Dyersburg solved one of its recent problems.

The city depends upon municipally-owned utilities, including gas, water, and electricity. Under ordinary circumstances, Dyersburg uses natural gas. However, as is so often the case, L. P. gas is used as a stand-by fuel for severe cold spells.

With population of the city growing, Dyersburg faced storage problems for its gas. Engineers made a comprehensive study of the situation and said a new 30,000-gal. tank should be bought. This would cost an estimated \$14,500, Director of Public Works I. C. McLester was told.

As he studied the problem, McLester developed an idea: build up year-around use of LPG to a point where the average gas on hand could absorb peak loads. He suggested that all municipal vehicles and equipment be converted to L. P. gas. After this was explained to them, city officials agreed to use his idea.

"The next step," said McLester, "was to get in touch with Frank Bube, St. Louis Division motor fuel salesman for Phillips Petroleum Co., for advice on how to handle the mechanics of the conversion work."

NOW...



MET R FLO

LP GAS FUEL SYSTEM

AN ALL NEW AND ADVANCED DESIGN
IN LP GAS CARBURETION FOR

- FORKLIFTS
- AUTOS
- INDUSTRIAL
- TRACTORS
- TRUCKS
- ENGINES

MET-R-FLO is a POSITIVE PRESSURE fuel system in which vaporized fuel is injected into the intake air stream as it passes through the carburetor. The fuel pressure is controlled by the engine manifold vacuum and the fuel is metered to exact engine requirement. A new degree of power, economy and performance can now be realized than was heretofore possible with conventional carburetion.

Write For Details

AMERICAN LIQUID GAS CORPORATION

1109 Santa Fe Avenue, Los Angeles 21, Calif.



Parkhill

Safety Hose Nozzles

Repairs are easy
Immediate shipment
Nozzle Parts
Adaptors, to pipe-
Acme-POL

For information ask

PARKHILL-WADE

475 Huntington Drive, San Marino, Calif.

Dyersburg conversion

Dyersburg requested bids for the conversion job. A local firm, Airlene Gas Co., a Phillips Petroleum distributor, was the low bidder.

Officials of Airlene worked with John Smartt, representative for the Tom Gorman Co. of Tulsa, Okla., distributor for Ensign carburetors. They made a complete check of the municipal vehicles to be converted and drew up a list of the equipment required to convert each vehicle. Aiding in the survey were Howard Jones, executive vice-president of Airlene, and Flois Murphy, also of Airlene.

Carburetion experts of Airlene headed by Murphy, handled the conversion work, only fire fighting equipment and a steamroller were excluded—because of their infrequent use.

Conversion was first accomplished on trucks, pickups, dump trucks, and electric power-servicing equipment. After those came pole trucks, cargo trucks, an asphalt distributor and asphalt pumps and heaters.

Airlene then worked on police cars which, like other vehicles used for trips, have combination carburetion, for both L. P. gas and gasoline.

"By having two tanks on each car," explained McLester, "we can store LPG in them and also use it on trips. My personal car, for instance, can carry a total of 35 gal. of fuel, a definite convenience on a trip."

Carburetion was fitted for the various engines, and particular attention was paid to the ignition systems on all of the units. Ensign carburetion equipment was installed. Airlene converted from hot to cold manifolds on all trucks of two-ton size or over.

One truck that sprays water on the streets has an auxiliary stationary engine on the truck itself. The truck that heats asphalt has a fire box, and a stationary engine to pump the asphalt. LPG is used for heating the asphalt in the truck.

Some difficulty was encountered in the placement of propane tanks on certain trucks because of their design. On the electric line truck, the tank was placed above the cab



Ford Tractors in two power sizes are available with Zenith LP-gas carburetor systems. LP-gas conversion units are offered for 600, 700, 800 or 900 series Ford Tractors.

FORD TRACTORS PROVE THESE ADVANTAGES OF ZENITH LP-GAS SYSTEMS

Zenith* carburetion systems for LP-gas give tractor dealers new and appealing sales advantages. Think how many of your customers will be interested when you demonstrate features like these—

1. Substantial savings in fuel costs
2. Quieter, smoother operation
3. Fewer overhauls
4. Fewer tuneups
5. Cleaner spark plugs

6. Longer oil life
7. Minimum dilution of crankcase oil
8. Underwriters' Laboratories approved
9. Clean, odorless exhaust

Zenith is not only the oldest but also one of the most experienced manufacturers of carburetors for farm tractors. This experience is applied to its LP-gas systems to assure your customers of *all* the advantages of LP-gas fuel *at low cost*.

Also it is easy as well as profitable to enjoy LP-gas advantages with Zenith LP-gas conversion units—available for conversion of all makes of gasoline tractors.

For complete details on how you can share in this rapidly expanding market, write to: LP-Gas Sales Department, Zenith Carburetor Division, 696 Hart Avenue, Detroit 14, Michigan.

*REG. U.S. PAT. OFF.

Zenith Carburetor Division



NOW!

**Rebuilt Exchange
ON ENSIGN MODEL
"R" REGULATORS
\$19.50 Net!!!**

**Model "R" Regulators Rebuilt to
FACTORY SPECIFICATIONS with
GENUINE FACTORY PARTS**

Backed by our 20 years of L.P.G. Carburetion experience ELLIS MANIFOLD CORPORATION now offers you the following exchange prices.

ENSIGN MODEL "R" #4893	\$19.50 NET
ENSIGN MODEL "R" #8874	22.50 NET
ENSIGN MODEL "R" #8391	24.50 NET
ENSIGN MODEL "R" #8392	25.60 NET

(Exchanges on other makes available soon)

Dig those old Model "R"s out of your shop and send them to us, we'll exchange them with rebuilds ALMOST as good as NEW and you'll have something to SELL! ! ! ! !

All Exchanges Fully Guaranteed!!!!

TERMS: C.O.D. until credit has been established. Naturally, we must charge for broken or damaged parts.

Ellis Manifold Corp.

(Mfr. of Ellis Bu-Power "COLD" Manifolds)
2134 E. Washington Blvd., Los Angeles 23, Calif.
Phone AMgeius 2-4162

**Dyersburg conversion . . . entire conversion
job cost the city only \$10,500**



LPG is pumped into one of Dyersburg's many pickups at the city garage.

after a great deal of consideration. This location has proved quite satisfactory.

As big a tank as feasible was

placed on each vehicle to give it a greater supply of fuel.

Dyersburg keeps a 100-gal. service tank at the city garage to supply vehicles that may run out of gas. Dyersburg's specially designed rolling tank takes gas to the location.

McLester says that L. P. gas has worked excellently for the city, both from an economic and an efficiency standpoint. Costs of fuel, he said, have been reduced as much as five cents per gal. Consumption of oil has been knocked down to a bare minimum.

Spark plugs now last longer and maintenance generally is lower than before the conversion was made.

McLester says that the chief saving to date has been in avoiding the purchase of the new 30,000-gal. tank for \$14,500. The entire conversion job, which lasted two months, cost the city only \$10,500.

The conversion has been more than satisfactory and, in time, will bring greater savings. Airlene's bid included a guarantee on the equipment for one year. Under this guarantee, Airlene has been assisting Dyersburg's city mechanics on service problems.

"But such problems have been few and far between," said well-pleased McLester. "L. P. gas has

**WESTERN
TANK & STEEL CORP.**

PO BOX 1338 PO5-9474
LUBBOCK, TEXAS

**The Nation's No. 1 Manufacturer of
LPG**

**AUTOMOBILE,
TRUCK AND
TRACTOR
TANKS**

*The name assures you of top
quality materials and workmanship*

Director of Public Works I. C. McLester (right) came up with the idea for the huge conversion job. He is shown discussing the project with Howard Jones, executive vice president of Airline Gas Co., the firm that did the actual conversion work.



proven its efficiency as a fuel and the equipment has required little servicing."

The Dyersburg Gas Department paid for all conversions. Each of the city's other departments pays 2½ cents per gal. above the Gas Department cost to amortize the conversion expense. When this cost is covered completely, all departments will receive gas at the wholesale price from the Gas Department.

By using L. P. gas all the time, Dyersburg's operation is made more flexible, the Director of Public Works is convinced.

"Under our old arrangement," said McLester, "when we had a cold day that pulled us down part of a tank car, we had to wait for another cold day to pull it down a full tank car. Now by draining gas from the storage continuously and maintaining a regular shipment schedule, we are able to keep our average storage higher than before."

McLester believes that within two years, savings will be sufficient to pay for the conversion, as well as maintenance and fuel costs.

"And after that," he pointed out, "we figure that we can save quite a sum of money for the city of Dyersburg."

What do citizens of the city think about it all?

"Generally they approved the conversion to L. P. gas," said McLester. "There was only the usual small amount of criticism that may be expected with any new project."



Two-day driver meet set for June 30

A two-day conference for drivers in the L. P. gas industry will be conducted June 30-July 1 at Purdue University.

The purpose of the meeting is to broaden the skills and knowledge concerned with safety, conservation of equipment, specialized product handling, and safe driving.

The program is designed primarily for drivers in the L. P. gas industry and supervisors responsible for improved performance.

When warm weather turns off your Gas Load, pick it up with Beam Carburetion Equipment

LET BEAM LIFT YOUR LOAD!

A BEAM DEALERSHIP is a trouble-free, highly profitable operation for any LP-Gas dealer. No need to hire trained personnel to install and service Beam equipment. Your own employees can do the job.

Beam offers the most extensive product line... complete range of sizes in Vaporizer-Regulators, Dry-Gas Regulators, Natural Gas Regulators, Carburetors, Solenoid Valves, Filters, etc.

Beam makes the quality line... preferred by many engine and equipment manufacturers.

Beam makes the most advanced line—for over 23 years "out front" with the latest developments.

A Beam Dealership can make money for you. Write or phone today for complete information.
BEAM PRODUCTS MFG. CO.



Three Eastern Warehouses and 7 Traveling Field Men to serve you.



CLASSIFIED Advertising

All Classified Advertising payable with order. Copy must reach publisher's office prior to the 1st of the month preceding publication. Address: Classified Advertising Materials, BUTANE-PROPANE News, 198 S. Alvarado Street, Los Angeles 57, Calif.

SITUATIONS WANTED

MY 24 YEARS' EXPERIENCE IN ALL phases LP Gas, operations management, plant construction, fleet delivery, bottles, bulk Propane Air Plants and Utility operations, available June 1st. Reply Box 32, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

HELP WANTED

UNUSUAL OPPORTUNITY for an energetic married man for sales and service work with LP-Gas dealership, Cape Cod area. Some mechanical aptitude required. Massachusetts oil burner certificate desired. Right man can look forward to becoming manager. Salary plus commission. Reply giving full qualifications to Box 33, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

FIRST CLASS LP-GAS RETAIL MANAGER

for Texas bulk operation. Must have proven record of ability in sales, service, supervision and business management. Salary open depending on qualifications. Send complete summary of experience with recent photo. Only top level managers will be considered.

Reply Box 31, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

UNLIMITED

Employment Opportunities

Servicemen—Installation Men—Salesmen—Bulk Plant Managers

Many employment situations available for those with some experience in the LP-Gas Industry. Opportunities for advancement are constantly developing. Over 90 district offices in 18 states east of the Mississippi River. If you have experience in service, installation, selling or bulk plant management send me your detailed employment history, and state the general area in which you would be interested in being assigned.

ROBERT GANTERT,
Personnel Manager

SUBURBAN PROPANE GAS CORPORATION
WHIPPANY, N. J.

BUSINESS OPPORTUNITIES OFFERED

LPG BULK PLANTS. WE SPECIALIZE in selling petroleum properties throughout Midwest. Have number desirable plants for sale. OLE BRODD, PETROLEUM MARKETERS, 605 Produce Bank Bldg., Minneapolis, Minnesota.

L.P. GAS PLANT, APPLIANCE and Heating Business. Reason—Health. Good business and big opportunity. Reply Box 37, BUTANE-PROPANE News, 198 So Alvarado St., Los Angeles 57, Calif.

DISPLAY CLASSIFIED

\$12.00 a column inch per issue. Choice of 18, 14, 12, 10 pt. display type for headings. Set with 1 pt. border. Maximum ad size 3". No cuts permitted. Publisher will set ad for maximum effect in space purchased.

UNDISPLAYED CLASSIFIED 15¢ a word. Set in 6 pt. type without border. \$3.00 minimum charge per insertion. If Blind Box number care of B-P News is used, count as five words.

POSITION WANTED. Undisplayed rate is one half of above rate, payable in advance.

DISCOUNT OF 10% if full payment is made in advance for four consecutive insertions of undisplayed ads.

BUSINESS OPP. OFF.—Cont.

LP GAS BUSINESS FOR SALE in southern Missouri; over 600 customers; two trucks, 36,000 gallon storage; a real moneymaker. \$40,000 will sell for \$20,000 down. Reply Box 25, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

FOR SALE — TRUCKS - TRAILERS

USED PROPANE DELIVERY TRUCKS, 1200 GALLONS W.C. Presently in use and being replaced with larger units. United Petroleum Gas Co., 4820 Excelsior Blvd., Minneapolis 16, Minnesota.

TRANSPORT. 5600 W.C. GALLONS. 250 lb. twin barrel 1953 Trinity. Like new paint, tires, and tandem. Excellent transportation and/or portable storage! Beverly 8-5235. Bob Ross Inc., 10918 South Western Ave., Chicago 43, Ill.

HAUL MORE PROPANE AND LESS STEEL! LOAD AND UNLOAD FASTER! Save the annual Federal tax on trucks that weigh more than 13,000 lbs! Users praise the Nor-Tex 2500 WG Single Barrel Payload Special of 202B X-rayed material and stress relieved. Weighs only 12,890 lbs. completely equipped with High Flow Plumbing, Meter, Hose, Hose Reel, Fire Extinguisher and mounted on cab-forward truck with 108" cab to axle dimension. Increased capacity pump boosts deliveries to 50 GPM. Vapor manifold permits easy simultaneous loading and unloading of twin tanks with either compressor or liquid pump. These popular, carefully engineered and sleek designed Nor-Tex Single and Twin units are produced in four attractive models: The "Standard"—the "Custom"—the payload "Special" and the "DeLuxe." That's not all! Twin units, up to 2000 WG, are mounted on 85" cab to axle. Start hauling more gas and less steel. Do it profitably and in much less time. Phone, wire or write for prices now. NORTH TEXAS TANK CO., Denton, Texas. Phone DUPont 2-5416.

TRADE WITH A TRADER! NEW & USED PROPANE TRUCKS

I'll trade with you on the phone! My ONE MAN SALES FORCE (myself) SAVES you the usual 10% sales commission, eliminates any mix-up on order, delivery date, financing, etc., yet this year, as in every year for past 10 years, I SELL MORE tank trucks than anyone else. If you have a trade-in, send me photo and description. Used and NEW units (1400-2200 WG) in stock for delivery NOW. EASY TERMS — (10% Down — 36 Moa. on balance—I carry my own paper). DON'T BUY OR LEASE a unit until you CALL ME—Day or night. WHO AM I?

Preston Grace—Ph. 570

WHITE RIVER DISTRIBUTORS
Batesville, Arkansas

FOR SALE—TRUCKS - TRAILERS - Cont.

NEED A NEW OR USED PROPANE BULK TRUCK?

Why don't you call a man who KNOWS trucks, likes to TRADE, makes quick delivery, has EASY TERMS, appreciates your business, and SAVES YOU MONEY. All sizes in stock. Hundreds of SATISFIED CUSTOMERS the World Over.

Preston Grace

WHITE RIVER DISTRIBUTORS
Ph. 570—Batesville, Ark.

TRANSPORTS: SINGLE OR TWIN barrel; new or used; for lease, or sale on budget or rental sale plan. If you want maximum payload, with all of the latest equipment engineered to fit your truck, roads, and your hauling problem, get the

LMC PAYLOADER

Contact Lubbock Machine & Supply Co., Inc., Drawer 1589, Lubbock, Texas

TRINITY BULK TRUCK UNITS

In stock, ready for immediate delivery. Buy early and avoid steel price increases.

Write, wire or phone RAY REEDY
TRINITY STEEL CO.
Dallas, Texas
Phone: FL-7-3961

WE SAVE YOU MONEY

LOOK at this typical SPECIAL

BRAND NEW 1959 Chev. 2 ton with 1800 gal. twin propane tanks, PIPED COMPLETE with Viking pump, Neptune Printer Meter, 20# fire ext., 75' each filler & vapor hoses, ICC lights, full size rear cabinet & controls, READY TO USE ONLY—

\$636.00 Down and 36 payments of \$181.45 including interest.

You SAVE over \$1,000.00 by buying instead of leasing. Other sizes (1400-2200 WG) & other makes new trucks (at FLEET PRICES) available. WE TRADE. We have USED TRUCKS & TANKS also. Call me anytime.

Preston Grace

WHITE RIVER DISTRIBUTORS
Ph. 570—Batesville, Ark.

FOR SALE—TANKS - CYLINDERS

VERTICAL PROPANE TANK, 10,544 gallons, complete with dispensers and pump. \$4,000.00 Cash. R. R. Eachus, Inc., 8738 Hermosa Drive, San Gabriel, Calif. ATlantic 6-7962.

CLASSIFIED Advertising



FOR SALE—TANKS—CYLS.—Cont.

USED TANKS—250-500 GALLON capacity. 80#-110# W. P.—\$50.00 up. 88# bottles—\$10.00 each. Reply Box 40, BUTANE-PROPANE News, 198 So Alvarado St., Los Angeles 57, Calif.

FOR SALE AT DISCOUNT: 20 lb. used, galvanized, propane cylinders in 3 models: 1, with permanent valve protection cap and $\frac{3}{4}$ " handwheel valve for use on trailers; 2, with standard valve protection cap and $\frac{3}{4}$ " handwheel valve; 3, standard Cash & Carry cylinder with valve for $\frac{3}{4}$ " connectors on Cash & Carry regulators. Inquire for details and prices, City Gas Service Inc., Wisconsin Rapids, Wisconsin.

SKID TANKS

— IN STOCK NOW —

3000 gallon size built especially rugged for oil field use. Write, wire or phone

Lubbock Machine & Supply Co., Inc.
P. O. Drawer 1549
Lubbock, Texas

PROPANE GAS SYSTEMS

"Listed by Underwriters' Laboratories, Inc." If you use as many as one load of tanks per year, it will pay you to contact us. Distribution throughout the Mid-West and Southern states.

LOWRY TIMS COMPANY

Quality Steel Products Division, Cleveland, Miss.

STORAGE TANKS

Immediate Delivery
250# WP Propane Storage Tanks, \$350 WG
through 15,450 WG: 72" diameter; 10,170 WG
through 16,800 WG: 84" diameter; 15,300 WG
through 16,800 WG: 95" diameter. Ready for im-
mediate delivery, our truck fleet. ORDER EARLY
and AVOID STEEL INCREASE.
Write, wire or phone RAY REEDY

TRINITY STEEL CO.
DALLAS, TEXAS
Phone: FL-7-3861.

USED DELIVERY TANKS

I—1040 Twin on 350 GMC—1954 model
Good Condition
I—1200 Twin-Tanks only
Fair Condition
I—1250 Twin-Tanks only
Good Condition
I—1430 Twin on 1951 Chev. Butane Powered
Fair Condition
LUBBOCK MACHINE & SUPPLY
PO 25261—Box 1589—Lubbock, Texas

FOR SALE—MISCELLANEOUS

FOR SALE—IMMEDIATE DELIVERY! Eureka Smokehouse Burner Assemblies! For meat smoke houses using bottled gas. Completely automatic. Clean filtered smoke. Distributes heat uniformly. Low gas consumption. Automatic temperature and pilot control. Less product shrinkage. Easily installed. Write for descriptive pamphlet. Eureka Equipment Company, P.O. Box 396, Beloit, Wisconsin.

DECALS MADE FOR TRUCKS. EQUIPMENT. Small or large quantities. Catalog free. Mathews Co., 827 S. Harvey, Oak Park, Ill.

SERVEL REFRIGERATORS

25—Model L400A \$20.00 each
25—Model R600A \$25.00 each
Immediate delivery—low cost shipping

FRED A. BROWN COMPANY
170 W. Cumberland St., Phila. 33, Pa.
Est'd. 1918

FOR SALE—MISC.—Cont.

— 20 % EQUIPMENT SALE
Carburetion, Lift Truck Cylinders, E. H. Steel
and brass fittings to 4", etc. For list, write
Box 27, BUTANE-PROPANE News, 198 So.
Alvarado St., Los Angeles 57, Calif.

DIXIE SEMI-LOCK HOODS, ALUMINUM
and Aluminum coated steel. Wall bracket or
free standing. GUARANTEED mechanically
for life. \$3.00 up. Dixie Manufacturing Com-
pany, Elizabethtown, Kentucky, Box 65. Phone
Collect RO-5-9229.

TWO USED (in good condition) 4 x 5 Dean
pumps. Complete with 5 H.P., 220, 3 phase,
Group D, Class 1 motors. Only \$450 F.O.B.
Dodge City, Kansas or Tulsa, Oklahoma. Write
or call Skelly Oil Company, Box 436, Tele-
phone Logan 1-3575, Kansas City, Missouri.

SERVEL GAS REFRIGERATORS

S400A—4 cu. ft.

BN600A—6 cu. ft.

S600A—with Cross-top Freezer

Used: Guaranteed in good operating order.
Excellent condition. Low delivery cost anywhere.
Send for illustrated folder NOW.

BEACH REFRIGERATOR CO.

196-11 Northern Blvd. Flushing 58, N. Y.
Phone Flushing 7-6161

WANTED—MISCELLANEOUS

WANTED TO BUY—USED BUTANE storage tanks, 1,000 gallons to 30,000 gallons. Also Butane bobtail and tandem trailer. Must be in usable condition. Price must be right. Reply Box 39, BUTANE-PROPANE News, 198 So. Alvarado St., Los Angeles 57, Calif.

WANTED—30,000 GALLON USED tanks;
will consider 18,000 gallon also. Reply to Mid-
west Bottle Gas Co., 119 North 3rd Street,
LaCrosse, Wisconsin.

WANTED TO BUY: USED 500 GALLON
L.P. Tanks; also L.P. Bulk Delivery Truck.
Must be good—12-1800 gallon cap. Send price,
etc. Imrie Appliance Co., Randolph, Wis-
consin.

FOR RENT or LEASE

6,000 to 30,000 PROPANE STORAGE for
sale, rent or lease. Financing and installation
available. Reply Box 38, BUTANE-PROPANE
News, 198 So Alvarado St., Los Angeles 57, Calif.

PROFESSIONAL SERVICES

INDIVIDUALLY DESIGNED Ammonia and LP Gas Plants

H. Emerson Thomas
& Assoc., Inc.
Westfield, N. J.

PROFESSIONAL SERV.—Cont.

LET MY 30 YEARS OF PRACTICAL "LP"
experience assure you maximum profits. Equipment
revisions, property evaluations for sales or
refinancing, and assistance on legal suits also
supplied. Floyd F. Campbell, Management
Counselor, 821 Crofton Ave., Webster Groves,
Mo.

PROPANE GAS PLANTS

ANHYDROUS AMMONIA PLANTS

Designed and Installed
PEACOCK CORPORATION
Box 268, Westfield, N. J.

L. P. GAS INSURANCE

Have your agent write us about our Complete and Comprehensive Coverage for Adequate Limits of Liability at Reasonable and Normal Rates with Specialized Safety Engineering and Claims Service. Available only in Alabama, Arkansas, Arizona, Florida, Georgia, Kansas, Louisiana, Mississippi, New Mexico, Oklahoma and Texas.

PAN AMERICAN FIRE &
CASUALTY COMPANY
Earl W. Gammage, President
P. O. Box 1662 Houston, Texas

BUSINESS RECORDS

BUSINESS RECORD FORMS. ALL-WEATHER EZE-SNAP delivery invoices, for use when making LP gas metered truck deliveries. 1000 sets (3 part) imprinted with name, address and telephone. \$18.00 per 1000 sets. Advise make of meter. DEGREE DAY SYSTEMS, Dept. BP WOODSIDE 77, L. I., N. Y.

SERVING 20,000 PETROLEUM COMPANIES over 30 years with petroleum price cards, customer reminder Eze-Stik labels, telephone call—service order—L/P metered delivery invoices, Eze-Snap Service Form, Duralumin ticket holders, Sort-O-Matic Rack, etc. Write us for details, no obligation. DEGREE DAY SYSTEMS, Dept. BP, WOODSIDE 77, NEW YORK.

The KNOW-HOW BOOK for LPG

* DEALERS * SALESMEN * SERVICEMEN

The Bottled Gas Manual has been accepted by many companies as the quickest way to acquaint new sales and service men with typical bottle gas problems. This 352 page (24 chapter) text book brings practical "working" facts to your entire staff in non-technical language. Nearly 10,000 copies in use.

\$4.00 per copy

We pay postage on orders accompanied by check or money order. In California add 4% for sales tax.

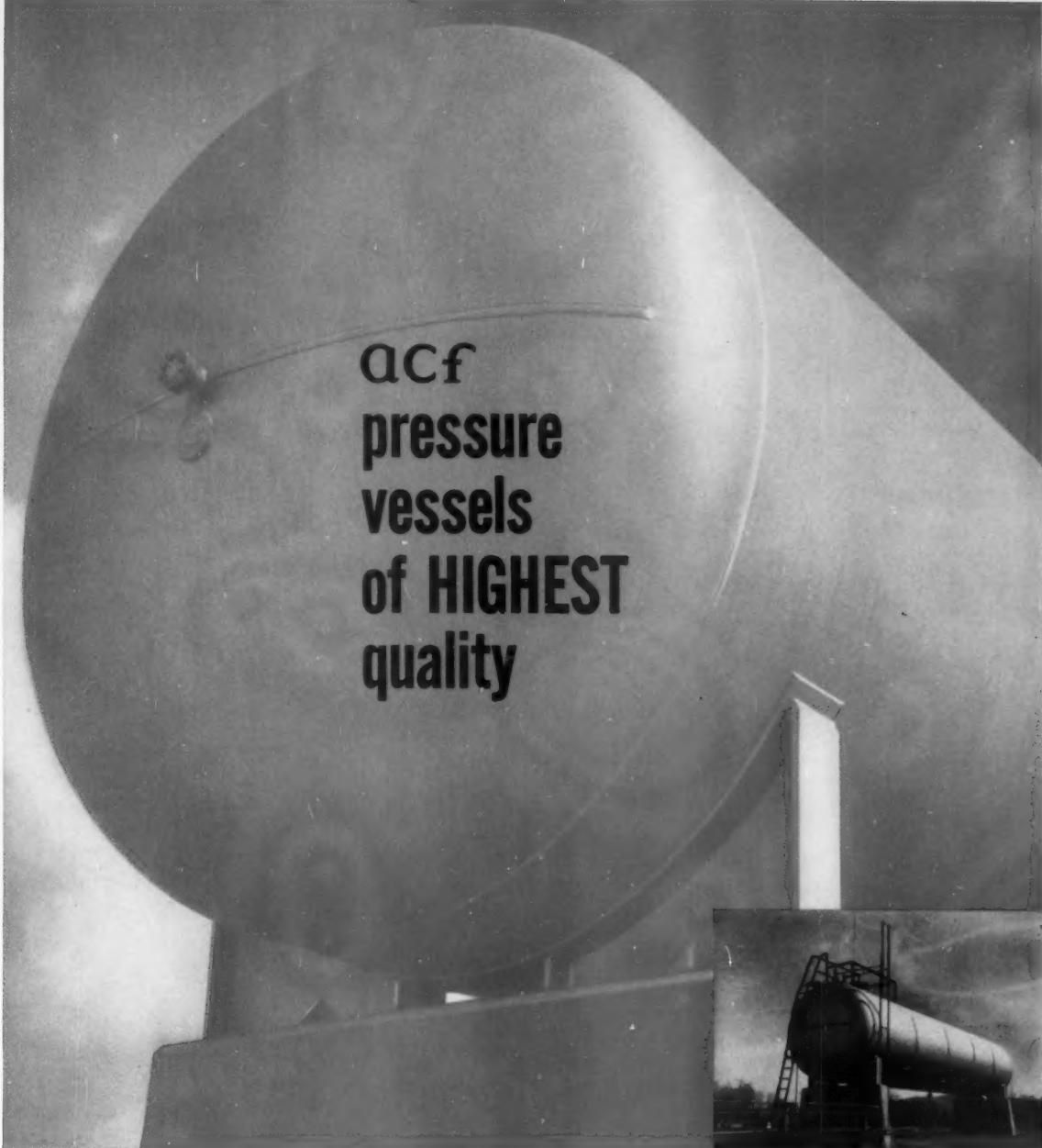
Butane-Propane News
198 S. Alvarado Street, Los Angeles

Advertisers

*These advertisers carry additional information on their products in the 1959 Butane-Propane Catalog.

This advertisers' index is published as a convenience and not as part of the advertising contract. Every care will be taken to index correctly. No allowance will be made for errors or failure to insert.

*ACF Industries, Inc., American Car & Foundry Div. Third Cover	Grayson Controls Div. Robertshaw-Fulton Controls Co. 16, 17	Queen Prods. Div., King-Seeley Corp. 82
*Aluminum & Brass Co. —	Griffiths, E. F. Co. —	Radiator Specialty Co. 96
American Liquid Gas Corp. 102	Hannay & Sons, Inc., Clifford B. —	Raypak, Inc. —
*American Meter Co., Inc. 75	*Hansen Mfg. Co. —	Reznor Mfg. Co. —
Anchor Petroleum Co. 81	Harper-Wyman Co. —	Richardson Gasoline Co., Sid —
Anco Mfg. & Supply Co. 2	Home Gas Equip. Co. —	Ridge Tool Co. —
Arko Air Conditioning Corp. 69, 90	*Hones, Chas. A., Inc. 98	Robertshaw-Fulton Controls Co. 16, 17
Armstrong Products Co. 94	Hydro-Therm, Inc. —	Rochester Gauges, Inc. 93
Arps Corporation —	Johnson Degree Day Systems —	*Rockwell Mfg. Co. 94
Baso, Inc. —	*Johnson Gas Appliance Co. —	Gas Products Div. Fourth Cover
*Bastian-Blessing Co., Inc. 4, 5	Johnson Machine Shop —	Roney, Inc. —
Beacon Petroleum Co. 76	King-Seeley Corp., Queen Prods. Div. 82	Samuel Stamping & Enameling Co. —
Beaird Co., Inc., The J. B. 41, 42	*Linde Co., Div. of Union Carbide Corp. 24	Selwyn-Pacific Co. —
Beam Products Mfg. Co. 105	Little, H. C., Burner Co. —	Sheffield Bronze Paint Corp. —
Behlen Mfg. Co. 71	Locke Stove Co. —	Shell Oil Company —
*Bendix Aviation Corp., Zenith Carburetor Div. 103	LPG Leasing Corp. —	Siegle Corp. —
Blackmer Pump Co. —	Lubbock Machine & Supply Co. 1	*Sinclair Oil & Gas Co. 20
Blue, John, Co. —	*Magic Chef Div., Dixie Products —	*Smith Precision Products Co. 88
Brown Stove Works —	Manchester Tank & Equip. Co. —	Spatz Paint Industries, Inc. —
Brunner Div., Dunham-Bush Co., Inc. 80	*Marvel-Schebler Prods. Div., Century Gas Equip. —	*Sprague Meter Co. 96
*Century Gas Equipment Marvel-Schebler Prods. Div. —	Master Tank & Welding Co. 65	Squibb-Taylor, Inc. 95
*Cities Service Oil Co. 7	Minneapolis-Honeywell Regulator Co. —	Stewart-Warner Corp. 73
Coleman Co. 18	Appliance Controls Div. —	Suburban Appliance Corp. 90
Corken's Inc. 77	Water Heater Controls Div. —	
Cribben & Sexton Co. 63	Mississippi Tank Co. 21	
Davis Engineering Corp. 98	Motorola Comm. & Electronics, Inc. —	
Day & Night Mfg. Co. 67	Norco, Inc. —	
Dearborn Stove Co. —	*North Texas Tank Co. 8, 9	
Deere & Company 15	Northwest Fabricators, Inc. 98	
Delta Tank Mfg. Co. —		
Dixon Valve & Coupling Co. 97		
Dunham-Bush Co., Inc., Brunner Div. 80		
Elgin Softener Corp. 96		
Ellis Manifold Co. 104	Ohio Foundry & Mfg. Co. 84	
*Ensign Carburetor Co. 100	Parkhill-Wade 102	
Fine Products Co. 94	*Pasley Mfg. & Dist. Co. 86	*Warren Petroleum Corp. Front Cover
Firestone Tire & Rubber Co. —	Peerless Mfg. Div. of Dover Corp. 89	Weatherhead Co., The 10
*Fisher Governor Co. 79	Phillips & Buttorff Corp. 89	Western Tank & Steel Corp. 104
Ford Motor Co. —	Phillips Petroleum Co. 12	Whitehead Mfg. Corp., D. W. 87
Gas Equipment Mfrs. Assoc. —	Powell Co., Wm. 23	Wood Mfg. Co., John —
General Processing Corp. 88	*Pressed Steel Tank Co. Second Cover	*Zenith Carburetor Div. Bendix Aviation Corp. 103
	Purchase Plans, Inc. —	



ACF pressure vessels of HIGHEST quality

GUARANTEED QUALITY because, in addition to our own rigid inspection, all tanks are National Board approved and are inspected and certified by Hartford Steam Boiler Inspection and Insurance Company.

STEEL-GRIT-BLASTING removes all mill scale before prime coat of paint, provides a superior bonding surface that assures lower maintenance cost throughout

*Write for the free four-page bulletin,
"ACF Storage Tanks", or ask any
American Car and Foundry
Sales Office for a copy.*

ACF
AMERICAN CAR AND FOUNDRY
DIVISION OF ACF INDUSTRIES, INCORPORATED
750 THIRD AVENUE, NEW YORK 17, N.Y.

Storage Tanks for
propane, chlorine,
refrigerant gases—
Propane Transports—
Chemical Transports—
Safety Valves

SALES OFFICES: New York • Chicago • Cleveland • Washington, D.C. • Philadelphia • San Francisco • St. Louis • Berwick, Pa. • Huntington, W. Va.

the life of the tank. Steel-grit-blasting inside assures perfectly clean, trouble-free installations.

STANDARD SIZES from 2,400 to 74,000 gallons and more, entirely fabricated at **ACF**, assures prompt delivery and economy, easy specifying for your needs. Optional features include integral steel saddles, Uniformed one-piece flued manway.

does your operation have a storage capacity problem?



**vapor
metering
will improve your
profit picture**

Does your operation have a storage capacity problem? Vapor metering will increase your storage capacity considerably by allowing you to make full use of customer's tanks. This is a big advantage especially when extra truck time is available or when you can get a price break on fuel.

Many operators have made the economy and convenience of vapor meters the hub around which to build and increase their businesses—profitably. Get full facts now. Write for "tell-all" bulletin ADV-41, Rockwell Manufacturing Company, Pittsburgh 8, Pa.



Safe — Economical — Convenient

The Rockwell vapor meter is made with a strong, impact-resistant outer housing of pressure cast aluminum alloy. It's rust-proof, corrosion-resistant. Mounting brackets are supplied to simplify installation.

